Wisconsin Partnership for
Activity & Nutrition 2005

wisconsin nutrition and physical activity state plan

a comprehensive plan to prevent obesity and reduce chronic disease in wisconsin

Department of Health and Family Services
Division of Public Health
Wisconsin Nutrition and Physical Activity Program

for more information about this plan or to obtain a copy contact:

Wisconsin Nutrition and Physical Activity Program
Bureau of Community Health Promotion
PO Box 2659
Madison, WI 53701-2659
p 608.267.3694
f 608.266.3125
e-mail: pesikmj@dhfs.state.wi.us
Visit our website at:
http://dhfs.wisconsin.gov/health/physicalactivity/index.htm

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foreword

December 2005

The Wisconsin Partnership for Activity and Nutrition, the Department of Health and Family Services, the Nutrition and Physical Activity Program, and other partners recently completed the Wisconsin Nutrition and Physical Activity State Plan. The plan's completion represents a collaborative effort of statewide partners, including individuals representing state and local public health, state and local education agencies, community and non-profit organizations, policymakers, health care providers and insurers, academia, transportation, businesses and advocacy organizations, to improve the health of Wisconsin residents.

We envision that the plan will:

- *Assist partners in meeting the Healthiest Wisconsin 2010 objectives, as the strategies in this document support and expand the 2010 recommendations.*
- *Focus partner efforts on interventions that are practical, achievable, and realistic for reducing the burden of obesity, improving nutrition and increasing physical activity.*
- *Bring partners together to work collaboratively toward shared goals, maximize opportunities and reduce duplication.*
- *Encourage policy and environmental changes that support healthy eating, physical activity and a healthy weight.*

The plan provides a framework for Wisconsin organizations to mobilize around a set of common goals affecting the prevention and management of overweight and obesity. The plan was developed with the understanding that most organizations have limited time and resources and that achieving these objectives will take the active involvement of many partners.

This plan is a call to action for individuals, schools, communities, businesses, healthcare systems and providers and policymakers to make changes necessary to assure the health and productivity of Wisconsin residents now and in the future.

We encourage everyone to take an active role in implementing the Wisconsin Nutrition and Physical Activity State Plan. Please join us in spreading the message that obesity prevention and management, healthy eating and increased physical activity is a priority in Wisconsin.

Sincerely,

Sheri Johnson, Ph.D., Administrator
State Health Officer

introduction

The epidemic of overweight and obesity in our Nation and in Wisconsin did not occur overnight and will not be eliminated overnight. Overweight and obesity is a multi-faceted issue, one that cannot be adequately addressed by any one program or intervention, therefore numerous partners must work together to address this issue through policy change and the implementation of interventions that promote behavior changes in individuals, families, organizations and communities. Promoting regular physical activity, healthy eating and creating an environment that supports these behaviors are essential to reducing the epidemic of obesity.

The Wisconsin Nutrition and Physical Activity Plan to prevent obesity and related chronic disease provides a statewide focus for obesity prevention, management and health promotion through nutrition and physical activity. The Wisconsin Partnership for Activity and Nutrition, the Nutrition and Physical Activity Program and other stakeholders will work together to accomplish the goals, strategies and objectives that are outlined in this plan. The plan activities to reduce overweight and obesity in Wisconsin will be targeted to reach children, adolescents and adults across all races and socioeconomic levels.

This plan is a call to action for individuals, schools, communities, businesses, healthcare systems and providers and policymakers to make changes necessary to assure the health and productivity of Wisconsin residents now and in the future. The plan will also serve as a guiding document for individuals and organizations to identify strategies and interventions to implement to address overweight and obesity in their community. There is a significant body of knowledge about the incidence, potential causes and impact of obesity; however, there is less knowledge of the most effective strategies to prevent and manage overweight and obesity. Throughout the planning process, the Wisconsin Partnership for Activity and Nutrition used evidenced-based research, best practices, emerging or promising strategies and their collective knowledge and understanding of the state's issues to develop a set of goals, strategies and objectives for action in a variety of settings and levels. The social-ecological model was used as a planning foundation. The premise of the social-ecological model is based on the understanding that health promotion includes not only educational activities, but also advocacy, organizational change efforts, policy development, economic supports, environmental change and multi-method strategies. This perspective highlights the importance of approaching public health problems at multiple levels and stressing interaction and integration of factors within and across sectors. Underlying this theory is the understanding that significant progress toward the goals will only occur when there is support for policy and environmental change that removes barriers and supports individual efforts to adapt a healthy lifestyle.

The Wisconsin Nutrition & Physical Activity State Plan hopes to:

- Provide a framework of what needs to be done and the resources needed to reduce the burden of obesity on the people of Wisconsin.
- Set priorities for improvement. The plan priorities provide direction to ongoing and new efforts in obesity prevention and management.
- Identify evidence-based strategies to achieve priorities. Effective strategies for prevention and management of overweight and obesity have been identified. For strategies where information on effectiveness is limited, the recommendations of workgroup experts and professional organizations were used to select the appropriate strategies. Strategies that are not supported by research evidence will be evaluated to determine their effectiveness in achieving the desired outcomes.
- Bring interested partners together to work collaboratively toward shared goals. Collaboration, both in planning and implementation, will lead to more efficient use of limited resources while ensuring that mutually identified priorities are addressed.
- Identify cost-effective means to implement priorities.
- Use resources efficiently by integrating and coordinating efforts to reduce duplication and expand capacity.

Who should use this plan?

The Wisconsin Nutrition and Physical Activity State Plan is a resource and guide for those who are involved in planning, directing, implementing, and evaluating interventions or initiatives in overweight and obesity prevention in Wisconsin.

To accomplish the plan goals a variety of partners will need to be involved including, but not limited to:

- Business Owners and Employers
- Payers and Insurers
- Community Based Organizations
- Physicians & Healthcare Providers
- Consumers
- Professional Organizations
- Educators
- Public Health Departments
- Faith Based Organizations
- Public Policy Advocates
- Food Producers and Vendors
- Sports and Fitness Organizations
- Government Agencies
- Restaurants
- Healthcare Systems
- State and Local Coalitions
- Media
- Transportation Planners
- Minority and Underserved Populations
- Universities and Researchers

What is included in this plan?

- A description of the burden of obesity in Wisconsin
- A summary of the history and background of the Wisconsin Partnership for Activity and Nutrition
- How this Plan is connected to Healthiest Wisconsin 2010 and other plans
- A description of the planning process through which this Plan was developed
- Goals and strategies to prevent and manage overweight and obesity, improve nutrition and increase physical activity in Wisconsin
- Environmental and policy changes to support healthy communities
- Current Information on evidence-based or promising interventions to be implemented
- Ideas on how to be involved in the implementation of the Plan
- Mechanisms to evaluate the impact of the Plan

the burden and challenge of obesity in wisconsin

the obesity epidemic

Rarely does a day go by without a news report on obesity and its complications. Rates of obesity have increased at alarming rates over the past 20 years both in the nation and in Wisconsin. The latest data from the National Center for Health Statistics show that 30 percent of U.S. adults 20 years of age and older- over 60 million people-are obese. This increase is not limited to adults. The percentage of young people who are overweight has more than tripled since 1980. Among children and teens aged 6-19 years, 16 percent (over 9 million young people) are considered overweight. Obesity has been labeled a public health epidemic.

These increasing rates are cause for concern because of their implications for Americans' health. Being overweight or obese increases the risk of many diseases and health conditions, including the following:

- Hypertension
- Dyslipidemia
- Type 2 Diabetes
- Coronary Heart Disease
- Stroke
- Gallbladder Disease
- Osteoarthritis
- Sleep apnea and respiratory problems
- Poor Female Reproductive Health/ Polycystic Ovarian Disease
- Some cancers (endometrial, breast and colon)

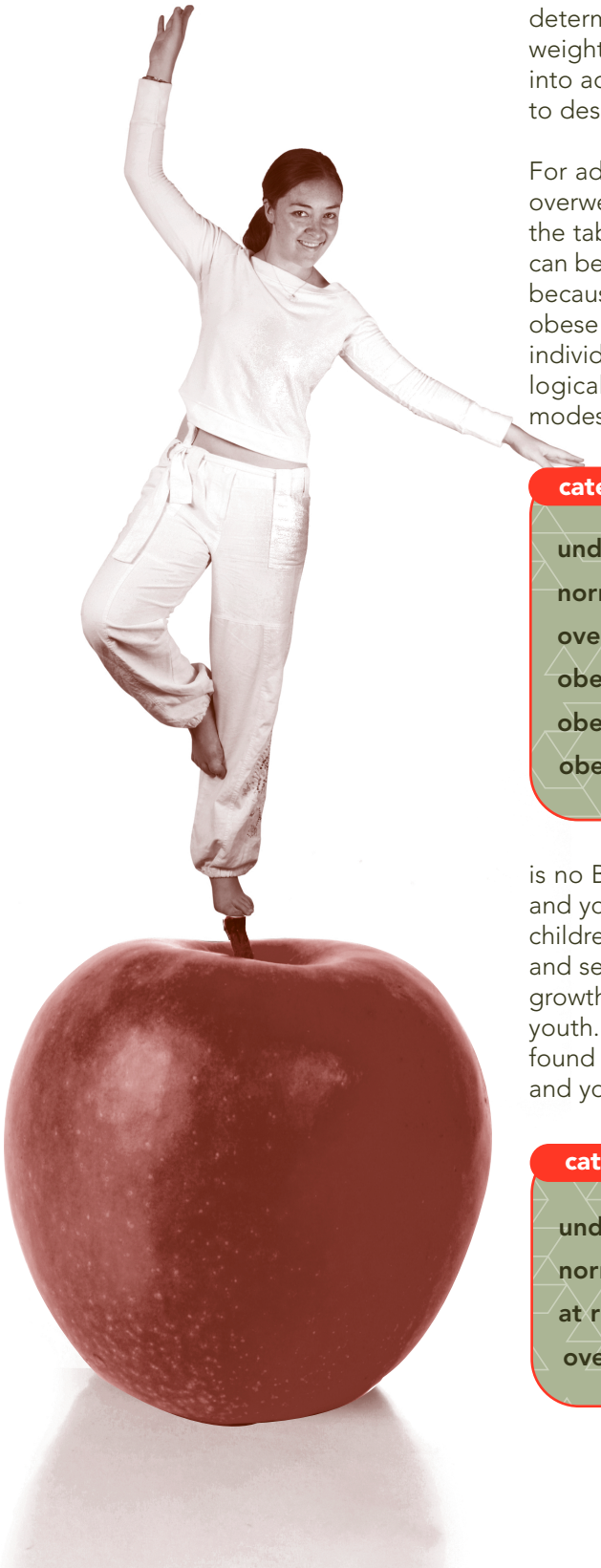
Overweight and obesity and their associated health problems also have a significant economic impact. Medical costs associated with overweight and obesity may involve both direct and indirect costs. The direct medical costs include preventive, diagnostic, and treatment services related to overweight and obesity. Indirect costs relate to morbidity and mortality costs. Morbidity costs are defined as the value of income lost from decreased productivity, restricted activity, absenteeism, and bed days. Mortality costs are the value of future income lost by premature death. According to a recent study of national costs attributed to both overweight and obesity, medical expenses accounted for 9.1 percent of total U.S. medical expenditures in 1998 and may have reached as high as $78.5 billion ($92.6 billion in 2002 dollars).[1] In Wisconsin, annual obesity-related medical costs were approximately $1.5 billion, of which almost $626 million are Medicaid and Medicare expenditures.[2]

The United States has taken pride in the fact that the life expectancy of each generation is longer than the previous generation. Unless effective population-level interventions to reduce obesity are developed, these increases in life expectancy may soon end. This would mean that our children and grand-children may live a less healthy and shorter life than we, as parents, are expected to live. In fact, the epidemic of obesity has the potential to under-mine the gains that have been made in other health areas.[3]

The obesity epidemic did not occur overnight. Obesity and overweight are chronic conditions. Obesity is a complex issue dealing with how behavior, environment, cultural, socioeconomic and genetic factors interact. Weight gain is the result of an energy imbalance where the number of calories taken in is greater than the number of calories used.

With progress in technology and transportation, there have been a number of changes that have broadened choices and changed eating and activity habits. Access to food has increased as well as the variety, types and portion size of food available. There are more pre-packaged foods, fast foods, restaurants, convenience stores and vending. Changes in the workforce and number of organized activities for children have impacted the number of meals eaten away from home or "on the go". These foods tend to be high in calories and less nutritious. Also, many people are working more sedentary jobs for longer hours lessening the time available for physical activity. Changes made to the transportation system and community design have resulted in more trips made by car or public transportation rather than walking and biking. [4,5]

body mass index



Body mass index, or BMI, is the commonly accepted measure of overweight and obesity for adults as well as children and youth. For adults, BMI is determined by taking into account a person's height relative to his or her weight. BMI for children and youth is determined differently because it takes into account not only height and weight but age and sex. The terms used to describe weight in adults and children differ somewhat.

For adults, weight classifications include underweight, normal weight, overweight, obesity class I, obesity class II and obesity class III as outlined in the table below. BMI can be estimated using a height and weight chart or it can be calculated using a formula (Appendix C). BMI is divided into categories because research has shown that as BMI increases into the overweight and obese ranges, so does the health risk. Weight loss in overweight and obese individuals often dramatically improves physical, metabolic, and endocrinological complications. For persons that are overweight or obese, even a modest weight loss of about 10% of total body weight, can improve some weight-related medical conditions, including diabetes and hypertension. Weight loss in overweight and obese persons can also improve depression, anxiety, psychosocial functioning, mood, and quality of life.[3]

category	BMI range
underweight	less than 18.5
normal Weight	18.5 to 24.9
overweight	25 to 29.9
obesity Class I	30 to 34.9
obesity Class II	35 to 39.9
obesity Class III	40 or higher

For children and youth, the term obesity can be used to describe a population of overweight children but not individual children, as there is no BMI-for-age classification of obesity. The preferred term for children and youth is either "at risk of overweight" or "overweight". Ideal weight for children and youth depends not only on weight and height but also their age and sex relative to other children of the same age and sex. For these reasons, growth charts are used to determine a BMI-for-Age percentile for children and youth. The 2000 CDC Growth Charts are recommended for use and can be found at www.cdc.gov/growthcharts. The BMI-for-Age categories for children and youth under age 20 are divided into the following percentiles:

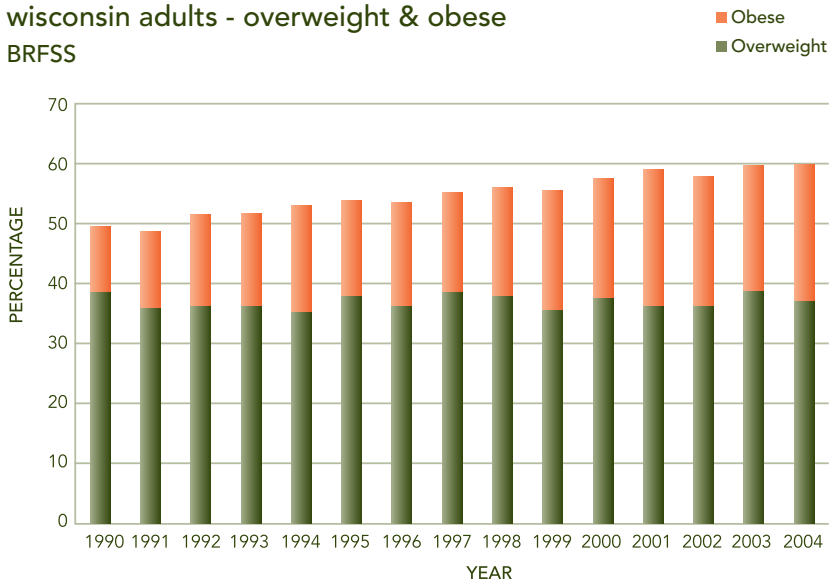
category	percentile
underweight	less than the 5th
normal	5th to 84th
at risk of overweight	85th to 94th
overweight	95th and higher

overweight and obesity in

Adults

In Wisconsin, about one of every four adults (23%) is obese and almost two-thirds (61%) are either overweight of obese. During the period 1990-2004, the prevalence of obesity in Wisconsin has more than doubled (11% 1990, 23% 2004 BRFSS). This trend in shown in Figure 1.

figure 1.
wisconsin adults - overweight & obese
BRFSS

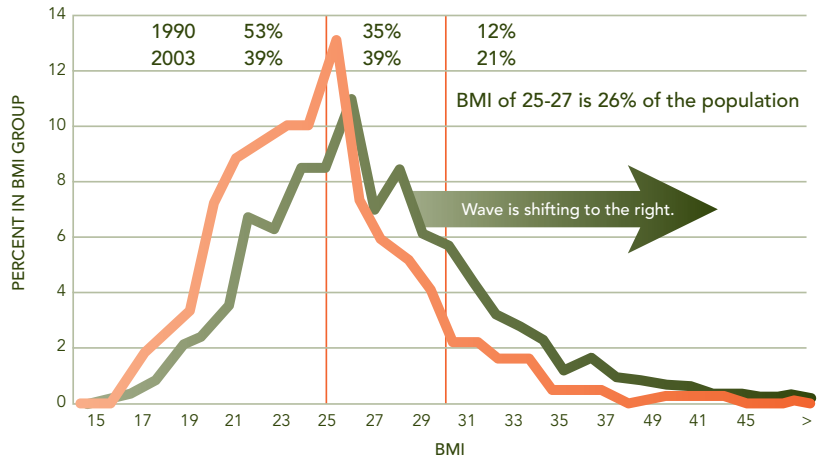


Obesity prevalence has increased for all age groups in Wisconsin over the past decade. Based on data from the 2004 BRFSS, the age group 18-24 had the lowest prevalence of overweight and obesity (39%) and the highest prevalence was among those 55-64 years (73%). The prevalence among the 25-34 age group was 58%, among 35-44 year olds was 60% and among the 45-54 age group was 67%. There are also disparities among gender. Of the 60% of adults who are overweight and obese, 69% are male and 51% are female.

Based on a 3-year rolling average of the BRFSS data, racial and ethnic disparities have been identified. Of the 60% of adults 18 years and over with the greatest prevalence of overweight and obesity are African American adults (73%) followed by both American Indian and Hispanic adults (66%), white (59%) and Asian (39%).

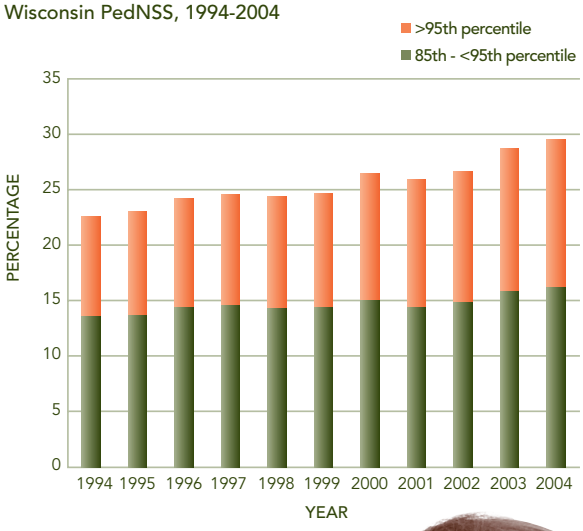
The weight status of adults in Wisconsin has also shifted over the past decade. More adults have become overweight (BMI>25) or obese (BMI>30) as illustrated in Figure 2.

figure 2.
trends in weight status among adults in Wisconsin
BRFSS 1990 versus 2003 - weighted



wisconsin

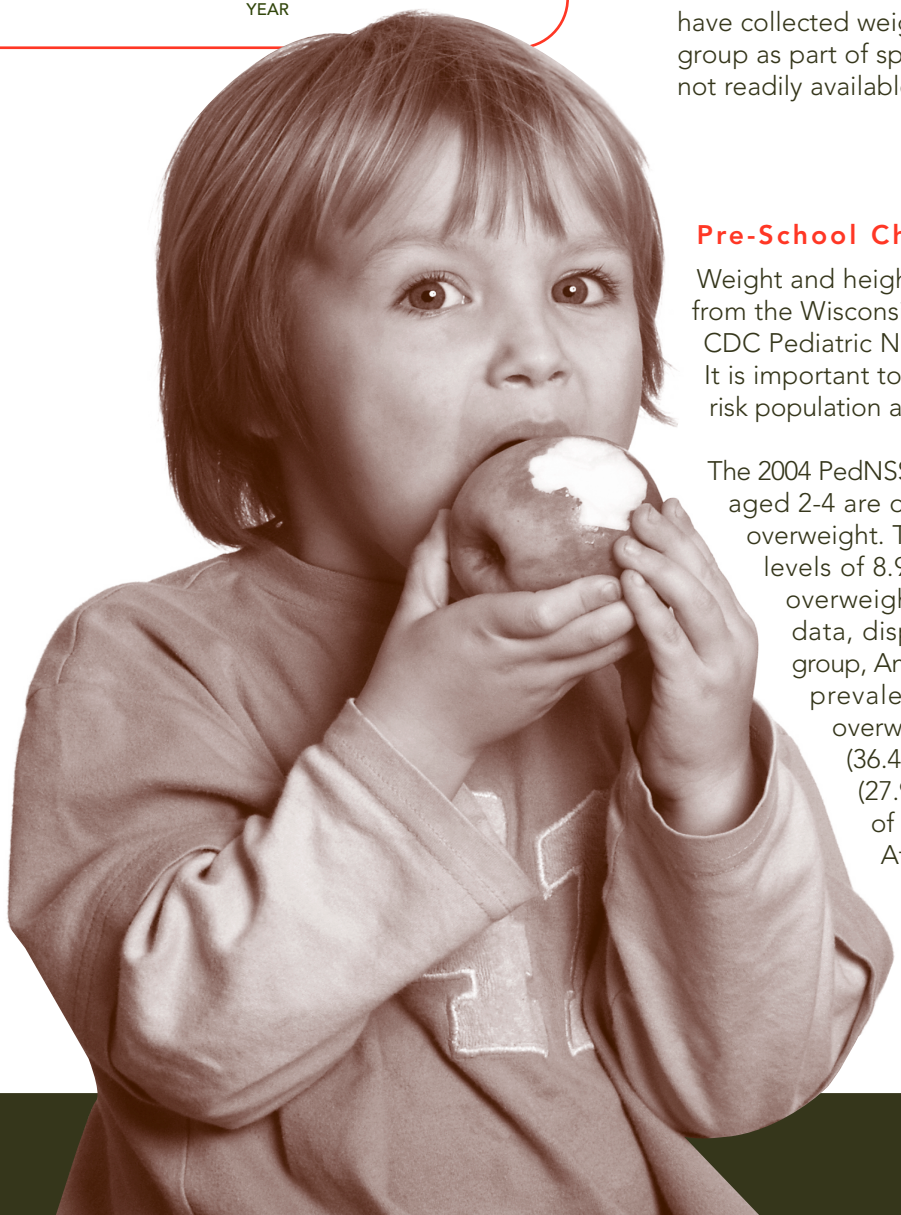
figure 3.
weight status among children ages 2 to 5 years
Wisconsin PedNSS, 1994-2004



Youth and Adolescents

The Wisconsin Youth Risk Behavior Survey (YRBS) collects self-reported weight and height from 9th-12th grade students. The YRBS is a school-based survey conducted in a representative sample of Wisconsin public high schools. The 2003 YRBS indicates that 15% of Wisconsin 9th -12th graders were at risk of overweight and 11% were overweight. Of the 26% who were at risk of overweight or overweight, 32% were male and 20% were female. A 3-year average was used to look at the prevalence of at risk of overweight and overweight by racial/ethic groups. Interestingly, the rates were similar across the racial/ethnic groups. The highest prevalence of at risk of overweight and overweight was among the African American teens (31%), followed by Asian (30%), then by Hispanic (27%), and last by both American Indian and White (25%).

Among children 5-13 years of age there is no specific data available in Wisconsin. Some communities and schools have collected weight and height information on this age group as part of special studies or initiatives. This data is not readily available for statewide surveillance at this time.



Pre-School Children

Weight and height data for pre-school children comes from the Wisconsin WIC Program and is analyzed by the CDC Pediatric Nutrition Surveillance System (PedNSS). It is important to note that this data represents a higher risk population and not all Wisconsin pre-school children.

The 2004 PedNSS report indicates that 13.3% of children aged 2-4 are overweight and 16.3% are at risk of overweight. These rates have increased from 1994 levels of 8.9% overweight and 13.8% at risk of overweight. When looking at the race/ethnic data, disparities are identified. For this age group, American Indian children have the highest prevalence of at risk of overweight and overweight (43.1%), followed by Hispanic (36.4%), then by Asian (32.9%) and White (27.9%). The lowest prevalence of at risk of overweight and overweight is among African American children (25.0%).

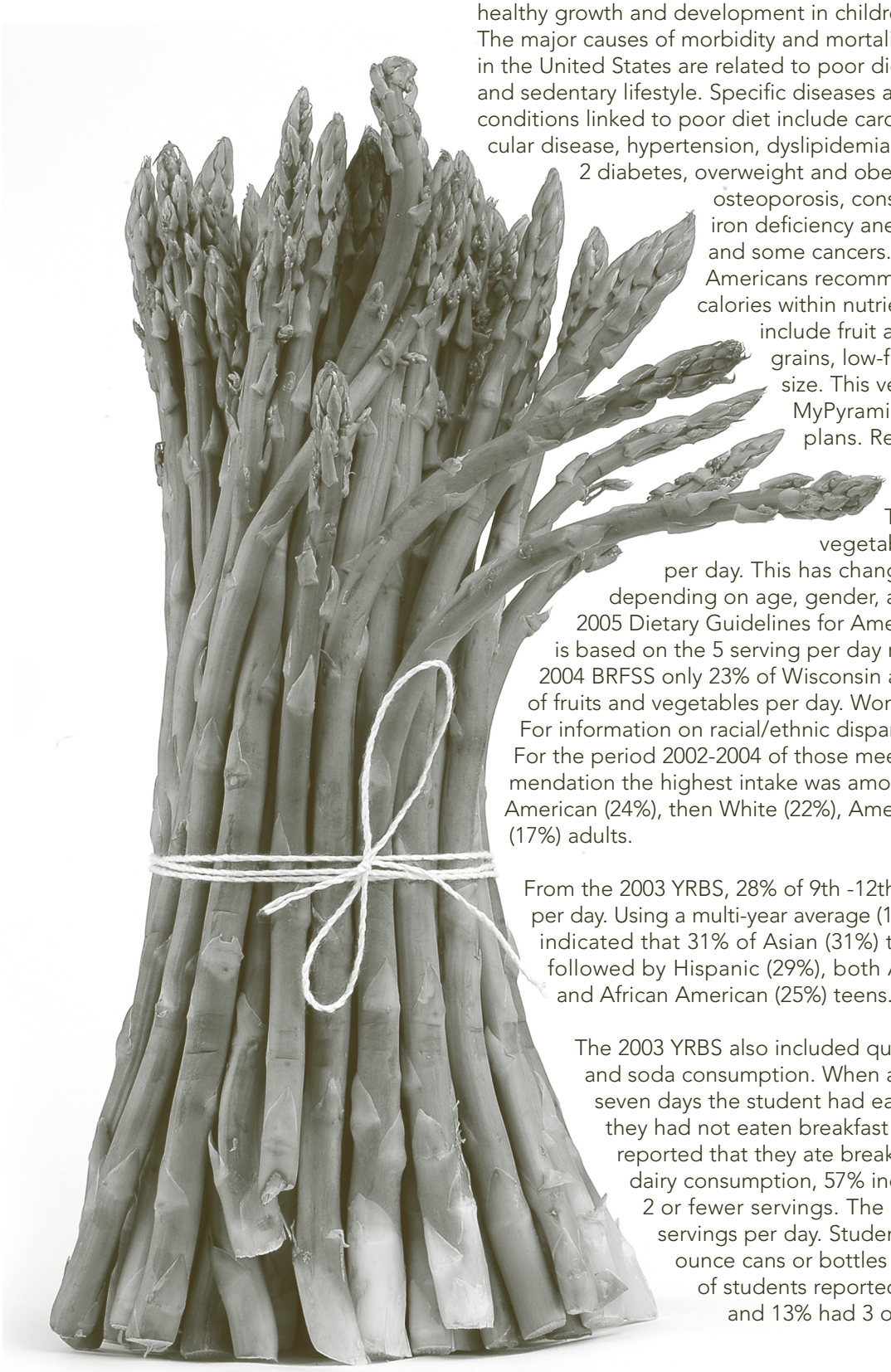
physical activity

Regular physical activity and physical fitness make important contributions to one's health, sense of well-being, and maintenance of a healthy weight. Regular physical activity has been shown to reduce the risk of certain chronic diseases, including high blood pressure, stroke, coronary artery disease, type 2 diabetes, colon cancer and osteoporosis. Physical activity may also reduce arthritis pain, reduce symptoms of depression and reduce falls among older adults. Therefore, it is recommended that adults engage in at least 30 minutes of moderate-intensity physical activity on most, preferably all, days of the week. For most people, greater health benefits can be obtained by engaging in physical activity of more vigorous intensity or of longer duration. Regular physical activity is also a key factor in achieving and maintaining a healthy weight. To prevent the gradual accumulation of excess weight in adulthood, up to 30 additional minutes per day may be required (or 60 minutes total) on most days of the week. Also to sustain weight loss for those previously overweight or obese about 60-90 minutes of moderate-intensity physical activity per day is recommended. It is also recommended that children and adolescents engage in at least 60 minutes of physical activity on most, preferably all, days of the week.

According to the 2003 BRFSS, only 54.7% of Wisconsin adults meet the guidelines for moderate physical activity and only 30.2% meet the recommendations for vigorous physical activity. The 2004 BRFSS provides information about those who engage in NO leisure time physical activity (no activity other than at work). Of Wisconsin adults, 18% report no leisure time physical activity. Using a 3 year average, it appears that of those reporting no leisure time physical activity, 38% are African American adults, followed by American Indian and Hispanic (25%), Asian (22%) and White (18%).

The 2003 Wisconsin Youth Risk Behavior Survey (YRBS) asked 9th -12th grade students about their activity level. 28% of high school students regularly engaged in moderate physical activity and 63% regularly engaged in vigorous physical activity. There were gender differences for moderate physical activity the males were 32% and females 25% and for vigorous physical activity for males was 70% and 56% for females of those were reported moderate or vigorous physical activity. Moderate physical activity refers to activity that causes small increases in breathing or heart rate and regular refers to 30 minutes, 5 or more times per week. Vigorous physical activity refers to activity that caused large increases in breathing or heart rate and regular refers to 20 minutes, three or more times per week.

nutrition



Good nutrition is vital to good health and for healthy growth and development in children. The major causes of morbidity and mortality in the United States are related to poor diet and sedentary lifestyle. Specific diseases and conditions linked to poor diet include cardiovascular disease, hypertension, dyslipidemia, type 2 diabetes, overweight and obesity, osteoporosis, constipation, diverticular disease, iron deficiency anemia, oral disease, malnutrition and some cancers. The 2005 Dietary Guidelines for Americans recommends consumption of adequate calories within nutrient needs. Some areas of focus include fruit and vegetable consumption, whole-grains, low-fat dairy, energy density and portion size. This version of the Dietary Guidelines and MyPyramid places emphasis on individual plans. Refer to www.MyPyramid.gov for more information.

MyPyramid.gov
STEPS TO A HEALTHIER YOU

The recommendation for fruits and vegetables has been at least 5 servings per day. This has changed to 3 1/2 to 6 1/2 cups per day depending on age, gender, and physical activity levels in the 2005 Dietary Guidelines for Americans. However, the available data is based on the 5 serving per day recommendation. According to the 2004 BRFSS only 23% of Wisconsin adults consumed 5 or more servings of fruits and vegetables per day. Women did better (29%) than men (26%). For information on racial/ethnic disparities a three year average was used. For the period 2002-2004 of those meeting the fruit and vegetable recommendation the highest intake was among Asian (29%), followed by African American (24%), then White (22%), American Indian (24%) and Hispanic (17%) adults.

From the 2003 YRBS, 28% of 9th -12th graders eat five or more servings per day. Using a multi-year average (1999-2003) for race/ethnic information indicated that 31% of Asian (31%) teens met the recommendation, followed by Hispanic (29%), both American Indian and White (28%) and African American (25%) teens.

The 2003 YRBS also included questions related to breakfast, dairy and soda consumption. When asked how many times in the past seven days the student had eaten breakfast, 15% responded that they had not eaten breakfast in the past week and only 31% reported that they ate breakfast everyday. When asked about dairy consumption, 57% indicated that they had consumed 2 or fewer servings. The recommendation for dairy is ~3 servings per day. Students were also asked how many 12-ounce cans or bottles of soda were drank yesterday. 60% of students reported that they drank at least one soda and 13% had 3 or more sodas.

breastfeeding

Breastfeeding is the norm for infant feeding. Infants who are not breastfeed are at greater risk of infectious diseases, type 1 and 2 diabetes, childhood cancers and asthma. Women who breastfeed their child benefit from lower incidences of breast cancer and ovarian cancer. There is also a growing body of evidence that suggests that breastfed infants receive protection against childhood overweight. The most benefit is received with longer durations of breastfeeding and with exclusive breastfeeding. Breastfeeding data is available from two sources. The Pediatric Nutrition Surveillance System (PedNSS) represents the Wisconsin WIC population and as mentioned earlier represents a higher risk population and not the whole state. In 2003, the National Immunization Survey included breastfeeding questions that represent the population as a whole.

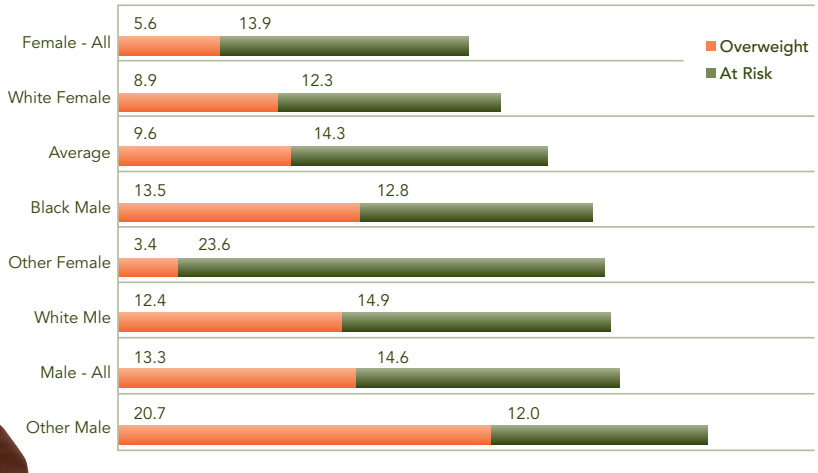
percentile

	breastfeeding initiation	breastfeeding at 6 months	breastfeeding at 12 months	exclusive breastfeeding at 3 months	exclusive breastfeeding at 6 months
wisconsin	69.9	35.1	14.0	42.1	16.0
milwaukee county	60.0	25.1	12.3	30.4	8.8
rest of state	72.6	37.8	14.5	45.2	17.9

The 2003 CDC National Immunization Survey provides information on breast-feeding initiation, breastfeeding at 6 and 12 months as well as exclusive breastfeeding at 3 and 6 months. Exclusive breastfeeding is defined as only breastmilk and water, no other solids or liquids. The table above shows Wisconsin breastfeeding data from the 2003 CDC National Immunization Survey. The Healthy People 2010 goals for breastfeeding are 75% initiation, 50% at 6 months and 25% at 12 months.

The 2004 PedNSS report indicates that 59.3% of infants were breastfed and that 25% are breastfed at least 6 months and 16.1% are breastfed at least 12 months. The breastfeeding initiation rates were lowest among African Americans (43.6%) followed by Asian (46.5%), American Indian (59.6%), and White (60.7%). Hispanics had the highest rate of initiation at 77.5%. The rate of breastfeeding decreases for all populations by 6 and 12 months.

figure 6.
adolescent at risk of overweight and obesity by race and gender



disparities in wisconsin

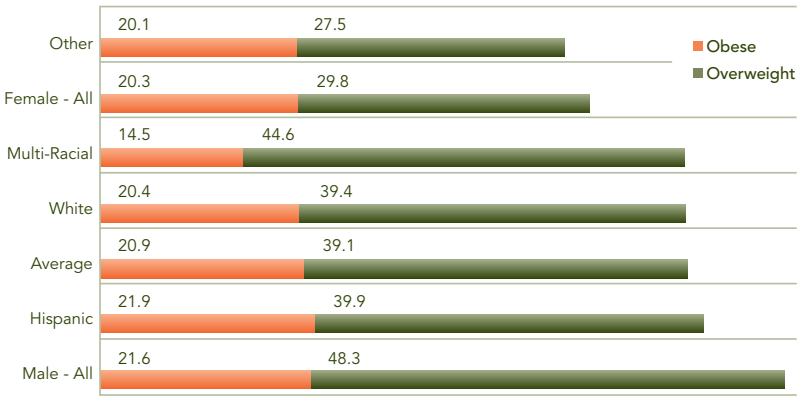
Overweight and Obesity

There is insufficient sample size in the Behavior Risk Factor Surveillance Survey (BRFSS) and Youth Risk Behavior Study (YRBS) to get specific data on some races. As a result, some of the populations at greatest risk may not be clearly identified. Some of the key findings are listed below.

Among Wisconsin **adults** the following disparities have been identified:

- ***African Americans*** have a much higher prevalence of obesity (37%) compared to the overall average (21%).
- Although obesity levels are similar, ***males*** have a much higher rate when you combine those who are obese or overweight: Males (70%), Females (50%)
- ***African Americans*** have a higher prevalence (74%) of overweight including obese compared to 60% for all races.

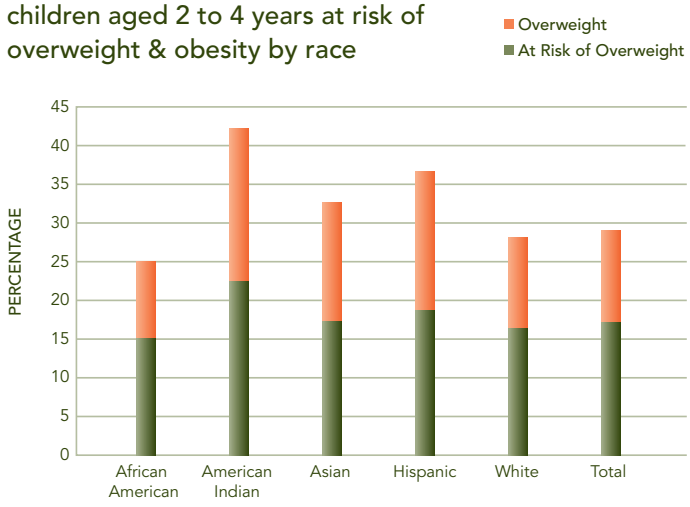
figure 5:
adult overweight and obesity by race and gender



For **adolescents** certain disparities stand out including:

- ***Males*** are more likely to be overweight (15%) than females (7%). 2003 YRBS.
- ***African Americans*** males and females have a higher prevalence of overweight (14%), compared to the average (10%).
- ***African American Females*** have a very high rate when you combine the percent who are overweight and the percent who are at risk for overweight. The combined percentage for African American Females is 38% compared to the average of 24%.

figure 7.
children aged 2 to 4 years at risk of overweight & obesity by race



For **pre-school children** participating in the WIC Program, the risk of overweight is disproportionately distributed among various racial and ethnic groups for ages 2 to <5 years. The prevalence of overweight is highest among Native American (20.5%) and lowest among African American (10.7%) children.

Physical Activity

There are a number of disparities in physical activity levels that would seem to link to higher rates of obesity for certain populations. As a whole, minorities with less education and household income have significantly lower physical activity levels. Females that fall in these categories have an even more pronounced disparity when compared to the White, higher educated and higher income population. Specific data includes:

- Physical activity levels vary by gender. Men (35%) are slightly more likely to get regular and intensive physical activity than women (26%), and they are also more likely to be get regular, moderate physical activity (men: 35%) than women (26%).
- Physical activity levels also vary by race. Whites (30%) are more likely to get regular and intensive physical activity than African Americans (19%), and they are also more likely to be get regular, moderate physical activity (White: 55%) than African Americans (39%).
- There is also an effect related to educational level. College graduates (36%) are more likely to get regular and intensive physical activity than someone with less than a high school education (22%), and they are also more likely to be get regular, moderate physical activity (college graduate: 59%) than someone with less than a high school education (38%).
- There is also a trend of increased physical activity based on income, but it is less pronounced than the other disparities.
- Black high school students, particularly Black females have significantly higher numbers for insufficient physical activity than White students. 60% of African American females reported they got insufficient physical activity compared to 30% for White females (2001 YRBS data).

Lastly, there is a noted decrease in physical activity in Wisconsin in the winter. Physical inactivity was highest in winter months (31% in January) and lowest in summer months (13% in July). Regular, non-intensive activity was highest in the summer months (42% in June) and lowest in the winter months (21% in December). Although not surprising, this needs to be considered in attempting to get people active and keep them active through a Wisconsin winter.

Nutrition and Breastfeeding

When examining the fruit and vegetable consumption data there is no one population group that stands out, as all groups fall well short of the recommendations.

The incidence of breastfeeding is lowest among the lower income population (59.3% vs. 69% for all populations). Among the low income population, the incidence rate among African Americans is disproportionately low (43.6%) when compared to all population groups (59.3%).

populations at greatest risk in wisconsin

Overweight and obesity, poor nutrition and lack of physical activity is a problem for all populations. The prevalence rates of overweight and obesity are important considerations, although not the only one, when determining potential populations for intervention. Based on the existing statewide data the African American population can be identified as a population at risk of obesity and its complications.

figure 8.
overweight & obesity for
african americans across the lifespan

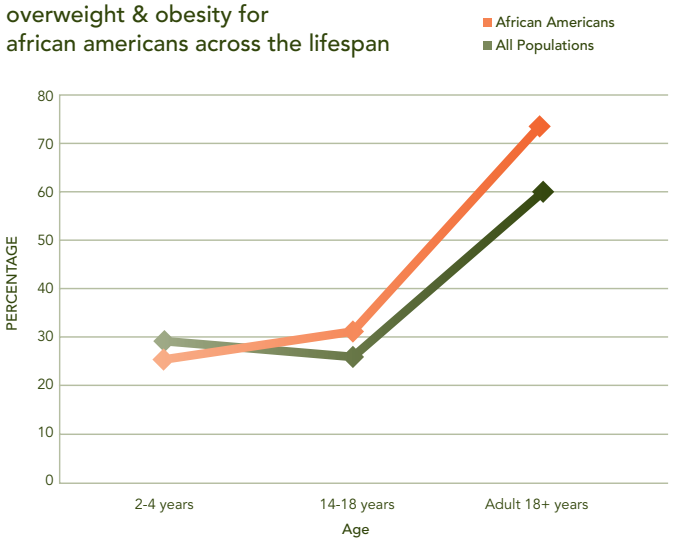
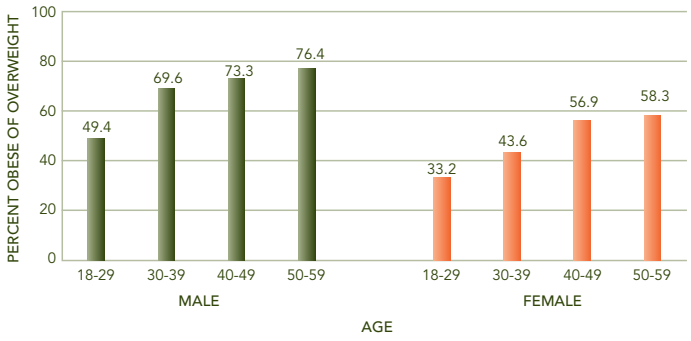


figure 9.
male and female key age ranges



Looking at data for young children, youth and adults an upward trend for overweight and obesity becomes apparent. This pattern for **African Americans across the lifespan** needs to be further investigated and addressed. Wisconsin data shows that African Americans have the lowest percentage of at risk of overweight and overweight children aged 2 to <5 (25.0% vs. 29.6% for all populations), above the average in the adolescent years (31% vs. 26% for all populations) and have the highest percentage of overweight and obese adults (73% vs. 60% avg.). The African American population also has the lowest rate of breastfeeding initiation (43.6%).

Other disparities that have implications for selecting target populations for intervention include: males 30-39 years of age, females 30-49 years of age and Asian teens. A noticeable rise in prevalence of obesity and overweight occurs in the 30-39 age range for males and the 30-39 and 40-49 age range for women. The male percentage jumps from 49% (ages 18-29) to 70% (ages 30-39) and then slowly rises until it levels off at ages 60 and over. The female percentage rises from 33% (ages 18-29) to 44% (ages 30-39) to 57% (ages 40-49) then slowly rises until it levels off at ages 60 and over. It was also noted that Asian teens have the 2nd highest rate of at risk of overweight and overweight (30%), but have the lowest rate of adult overweight and obesity (39%). This is a population at risk because of shifts in cultural and environmental influences with regards to diet and physical activity that are affecting the children at a greater rate than adults.

Regular physical activity coupled with healthy eating are key to maintaining a healthy weight. To maintain a healthy weight, there must be a balance between calories consumed and expended through metabolic and physical activity. In most individuals, overweight and obesity have many root causes, and weight gain results from a combination of excess calorie consumption and inadequate physical activity. To impact this problem we must address the disparities that exist, and promote good nutrition and physical activity. Previous interventions or attempts to address overweight and obesity in Wisconsin have not been well coordinated at a local, regional or state level. Through this plan, the Wisconsin Partnership for Nutrition and Activity and the Nutrition and Physical Activity Program will provide leadership in preventing and monitoring the burden of overweight and obesity in Wisconsin.

planning through partnership: the development of the plan

the wisconsin partnership to prevent obesity
background and history

The Wisconsin Nutrition and Physical Activity State Plan was developed as a partnership effort between the Wisconsin Nutrition and Physical Activity Workgroup (WINPAW) and the Wisconsin Nutrition and Physical Activity Program. This partnership has evolved and strengthened since 1999. Originally, WINPAW was convened by the Division of Public Health (DPH), Nutrition Section, to address the growing concern of childhood overweight in the federally funded child nutrition programs, such as the WIC Program, the Child and Adult Care Feeding Program (CACFP), School Meal Programs and the University of Wisconsin-Cooperative Extension. The goal for this collaboration was to provide consistent messages, to share ideas and to avoid duplication of efforts in promoting healthy food choices and regular physical activity for program participants.

Between 1999 and 2003, WINPAW met regularly and expanded its membership to include other public and private partners who were interested in preventing overweight and obesity, improving nutrition and increasing physical activity. During this time, WINPAW and its committees developed a "white paper" on childhood overweight, made policy recommendations for WIC, surveyed childcare providers participating in the CACFP, promoted Walk to School day, served as a pilot site for the CDC VERB™ Its What You Do campaign and provided leadership for the start of the Wisconsin Action for Healthy Kids Coalition.

As WINPAW continued to expand its focus shifted from children to the inclusion of all Wisconsin residents across the lifespan and included more environmental and policy changes in addition to individual/family behavior changes. In 2003, an organizational structure for WINPAW was adapted that included an executive committee and six committees. The six committees included: Environment, Schools, Families and Communities, Healthcare, Business and Industry and Surveillance. Disparities and Advocacy and Public Policy were identified as overarching themes that cross-cut all committees. Recently, an Advocacy and Public Policy committee was formed as part of the implementation process.

In July 2003, the Division of Public Health was awarded a cooperative agreement from the Centers for Disease Control and Prevention (CDC) for obesity prevention. As a result of this funding the Nutrition and Physical Activity Program, within the Wisconsin Division of Public Health, was created. This funding is designed to build capacity within Wisconsin to prevent and control obesity and related chronic diseases. As part of the effort to develop a coordinated nutrition and physical activity program infrastructure, three staff were hired to provide internal and external leadership and expertise for the development and implementation of evidence-based nutrition and physical activity interventions.

Under the direction of the Nutrition and Physical Activity Program, a strategic planning process began in Spring 2004 to develop a comprehensive nutrition and physical activity state plan to prevent obesity and reduce chronic disease in Wisconsin. The WINPAW mission and role served as a guide for the planning process.

In 2005, as part of the transition to implementation the membership felt that the name of the group, the Wisconsin Nutrition and Physical Activity Workgroup, did not accurately reflect the mission and role. The membership voted to rename WINPAW to the **Wisconsin Partnership for Activity and Nutrition**. From this point forward in the document the Wisconsin Partnership for Activity and Nutrition will be used.

mission

The mission of the Wisconsin Partnership for Activity and Nutrition is to improve the health of Wisconsin residents by decreasing overweight and obesity, improving nutrition and increasing physical activity.

The mission will be accomplished by:

- Planning, implementing and evaluating a state plan for nutrition and physical activity to prevent overweight, obesity and related chronic diseases.
- Serving as a resource for nutrition and physical activity information.
- Coordinating nutrition and physical activity efforts to prevent overweight, obesity and related chronic diseases.
- Advocating for public health policy change at all levels.
- Encouraging individual and population based lifestyle changes.

role

The Wisconsin Partnership for Activity and Nutrition is a partnership group comprised of a variety of public and private organizations, programs, and coalitions with a common goal of improving the health of Wisconsin residents through improved nutrition and increased physical activity. The Wisconsin Partnership for Activity and Nutrition provides statewide leadership for interventions and activities in the area of overweight and obesity prevention and management. The Wisconsin Partnership for Activity and Nutrition provides the "capacity" and key partnerships necessary for impacting overweight and obesity in Wisconsin.

involvement of key stakeholders

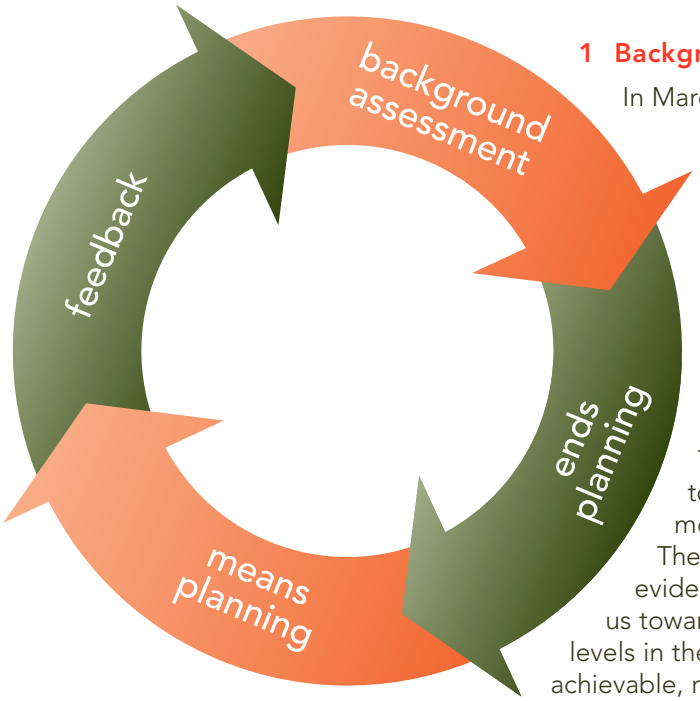
The Wisconsin Partnership for Activity and Nutrition consists of more than 70 individuals representing over 50 different organizations and programs who actively participated in the strategic planning process. These stakeholders included state and local public health, chronic disease programs, several government agencies, legislators, university researchers, practitioners and instructors, state and local education agencies, healthcare providers and insurers, non-profit organizations, treatment programs, advocacy organizations, professional organizations, local community coalitions, and transportation (See Acknowledgements). Each stakeholder brought a unique perspective to the planning discussion providing the expertise and balance necessary to develop a plan for Wisconsin to address the overweight and obesity problem.

The goals, strategies and objectives for the State Plan were developed by the Wisconsin Partnership for Activity and Nutrition during three planning sessions with committee work between each session. The partners provided constructive feedback to assure that the plan was realistic and feasible, but offered new and coordinated approaches to preventing and managing overweight and obesity. Steps were taken to identify a "critical mass" of partners willing and able to be responsible for leading the implementation of the plan objectives. Additionally, as an initial step in the transition from planning to implementation, the group discussed how the objectives would be prioritized. These were crucial steps to clarify their role during implementation as a plan for the state rather than a state health department plan.

The partners who developed the plan were anxious to begin implementation and have done so through different levels of participation. These levels include the individual organization level, the Wisconsin Partnership for Activity and Nutrition committee level and overall Wisconsin Partnership for Activity and Nutrition activities. Each member of the Wisconsin Partnership for Activity and Nutrition represents an organization or program committed to improving the health of Wisconsin residents through increased physical activity and/or improved nutrition. The majority of these organizations have been actively implementing interventions consistent with the state plan and have provided valuable lessons and insight into its development and future implementation. Because some of the short-term objectives focus more on the development and identification of resources and tools these efforts will be led by the Wisconsin Partnership for Activity and Nutrition committees and additional partners as needed. As part of the Wisconsin Partnership for Activity and Nutrition mission and role, there will be collective objectives identified to achieve statewide outcomes.

strategic planning process

The strategic planning process utilized during the development of the State Plan is described below:



1 Background assessment: where are we starting from?

In March 2004, each Wisconsin Partnership for Activity and Nutrition committee identified a mission or charge and completed a background assessment. The background assessment identified current efforts to support the committee mission; what gaps exist in current efforts; what barriers exist; what opportunities exist; and additional information needed. The purpose of this work was to assess the local and state infrastructure to prevent and manage obesity, improve nutrition and increase physical activity.

2 Ends planning: what is the future we want to create?

The next step in the planning process was for each committee to identify a long-term goal and 3-5 strategies that will have the most impact on the goal or the future we were trying to create. The criteria used in choosing the strategies included those that were evidence-based or an emerging or promising strategy, able to move us toward the goal, impacted the target population(s), reached multiple levels in the social ecological model and were SMART (specific, measurable, achievable, realistic, and time limited). Ultimately, this "future" was translated into the seven goal areas of the plan:

1 Infrastructure **2** Consistent Messages **3** Environment **4** Policy **5** Interventions **6** Surveillance & evaluation **7** Disparities

3 Means planning: how do we get there from here?

From June 2004 – December 2004, the committees developed each of the strategies into specific short and medium term objectives with action steps to achieve the strategy and overall goal. Committees also identified what key indicators or measures that could be used to monitor progress on the objective. In areas where the measure was not currently available or known it was noted as a gap.

From December 2004 – June 2005, the transition from planning to implementation began. Members reviewed the objectives and identified the organization for lead accountability or potential leads to assure that the plan will be achievable. The Wisconsin Partnership for Activity and Nutrition also formalized its identity, structure and mission as a partnership group to improve the health of Wisconsin residents by decreasing overweight and obesity, improving nutrition and increasing physical activity.

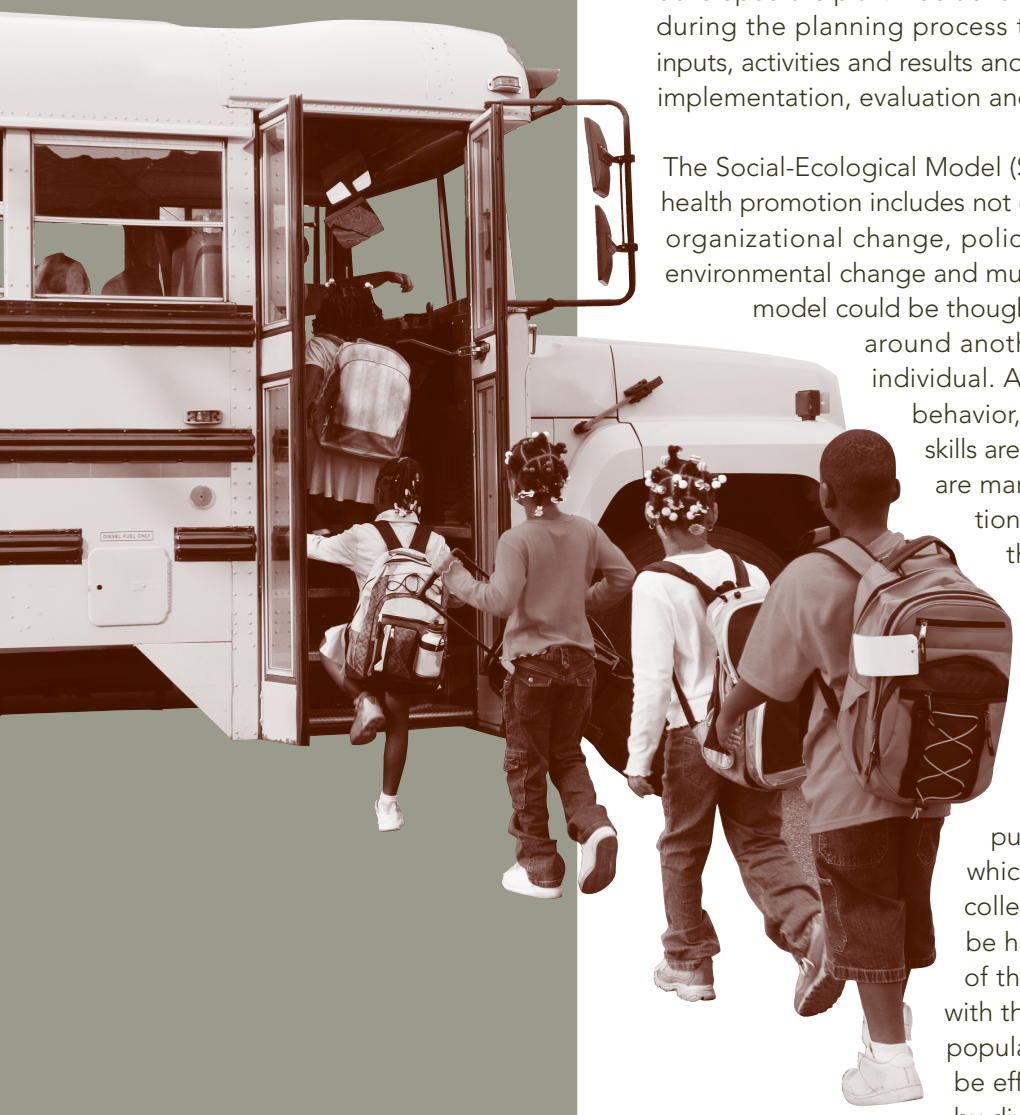
4 Implementation, evaluation, and adjustment: making it happen!

The goal of the plan is to serve as a working tool or guiding document for Wisconsin. Implementation of the plan will occur through the following:

- Nutrition and Physical Activity Program – the program will provide leadership, technical assistance and oversight to the implementation of the plan.
- The Wisconsin Partnership for Activity and Nutrition and its committees – some objectives and activities will be led by this group to build the infrastructure, to provide leadership and to facilitate action.
- Partner organizations and programs – many organizations and programs can incorporate the plan goals, strategies, objectives or action steps into their work and contribute collectively to the implementation. This may, at times, mean a re-prioritizing or the shifting of resources and staff.
- Grants or special project funding may be leveraged to support the implementation of the plan objectives at a state and local level.

theory and model

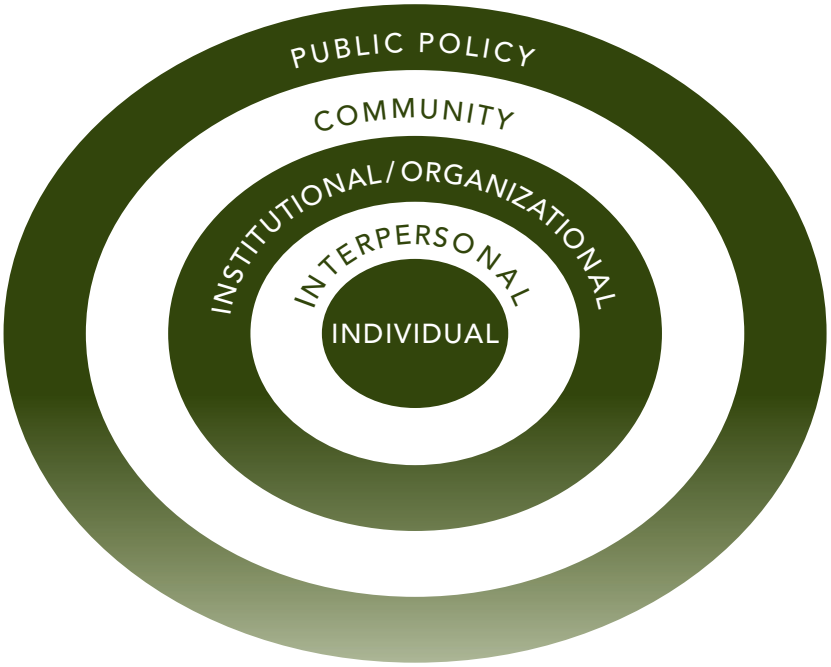
The Wisconsin Nutrition and Physical Activity State Plan provides a statewide focus for overweight and obesity prevention and management, improved nutrition and increased physical activity. As a framework for developing the plan the Social-Ecological Model was used. In addition to this theoretical perspective, the Institute of Medicine's report, *The Future of the Public's Health in the 21st Century* provided a basis for the charge given to the Wisconsin Partnership for Activity and Nutrition committees as they developed the plan. Additionally, the logic model (Appendix B) was used during the planning process to describe the relationships between inputs, activities and results and as an approach to integrate the planning, implementation, evaluation and reporting.



The Social-Ecological Model (SEM) is based on the understanding that health promotion includes not only educational activities but also advocacy, organizational change, policy development, economic supports, environmental change and multi-method strategies. The social-ecological model could be thought of as an onion, with one level wrapping around another. At the center of the model is the individual. At this level, the internal determinants of behavior, such as knowledge, attitudes, beliefs, and skills are considered. This is the foundation, but there are many external forces (interpersonal, organizational, community, and societal) that influence these individual determinants. In order to facilitate behavior change it is important to address these external factors as well. The following diagram and descriptions show the interaction and importance of the different levels.

In 1988, the Institute of Medicine (IOM) published a report *The Future of Public Health* which defined public health as what society does collectively to assure the conditions for people to be healthy. The Committee on Assuring the Health of the Public in the 21st Century was convened with the charge to create a framework for assuring population health in the United States that could be effectively communicated to and acted upon by diverse communities. The committee embraced the vision articulated by Healthy People 2010 – *healthy people in healthy communities*. The committee report focuses on the governmental public health infrastructure and several partners or "key actors" in the public health system including the community, the health care delivery system, employers and business, the media, and academia.

a social-ecological model for levels influence



public policy:
local, state and federal government policies, regulations, and laws

community:
social networks, norms, standards and practices among organizations

institutional/organizational:
rules, policies, procedures, environment, and informal structures within an organization or system

interpersonal:
family, friends, peers that provide social identity, support and identity

individual:
awareness, knowledge, attitudes, beliefs, values, preferences

Based on data from McElroy KR, Bibeau D, Steckler A, Glanz K., *An ecological perspective on health promotion programs.* Health Education Quarterly 15:351-377, 1988.

Several areas of action and change were outlined, including:

- adopting a focus on population health that includes multiple determinants of health;
- strengthening the public health infrastructure;
- building partnerships;
- developing systems of accountability;
- emphasizing evidence; and
- improving communication.

In developing the state plan for obesity prevention and management these theories and concepts served as a reminder to the Wisconsin Partnership for Activity and Nutrition that the health of populations and individuals is shaped by a wide range of factors in the social, economic, natural, built, and political environments. These factors interact in complex ways with each other and with individual traits such as gender and genetics. Approaching health from such a broad perspective takes into account the potential effects of social connectedness, economic inequality, social norms, and public policies on health-related behaviors and on health status.

key areas to focus efforts

The CDC has identified major focus areas for state obesity prevention programs based on the current and emerging or promising evidence that most likely impact overweight and obesity. These focus areas include:

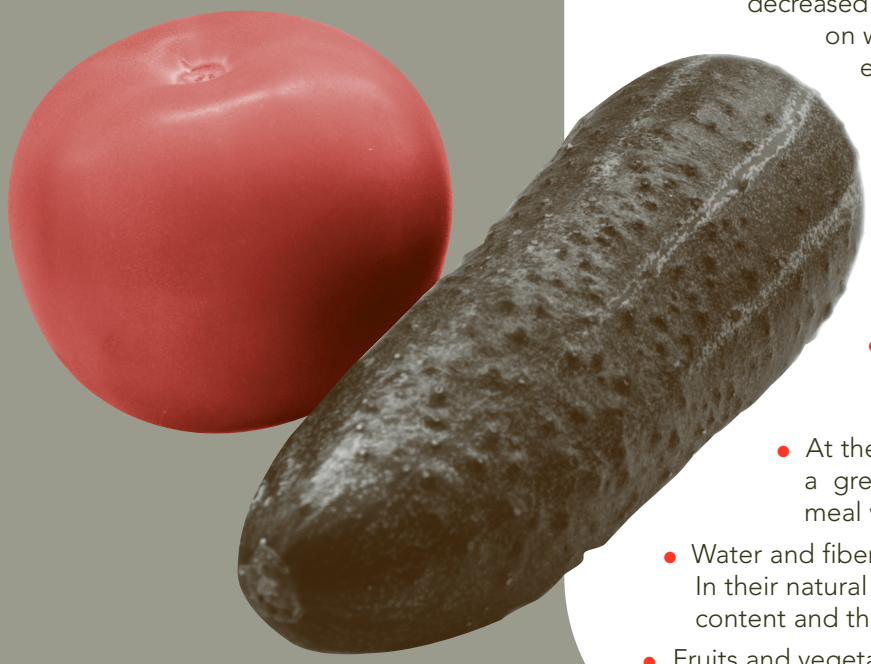
- promotion and support of breastfeeding;
- increased fruit and vegetable consumption;
- increased physical activity; and
- reduced television time.

Breastfeeding

The Nutrition chapter of Healthy People 2010 begins: "*Nutrition is essential for growth and development, health, and well-being. Behaviors to promote health should start early in life with breastfeeding and continue through life with the development of healthful eating habits.*" There is a growing body of evidence that suggests that breastfeeding offers protection against childhood overweight. Several studies provide evidence that any breastfeeding and breastfeeding for longer durations protect against overweight in young children and adolescents, although the mechanism by which this protection occurs is not clearly understood. The CDC Guide to Breastfeeding Interventions has identified six interventions that have been shown to be effective at promoting and supporting breastfeeding. These include: maternity care practices, support for breastfeeding in the workplace, peer support, educating mothers, professional support and media and social marketing.

Fruit and Vegetable Consumption

Consuming a diet high in fruits and vegetables is associated with lower risks for numerous chronic diseases, including cancer and cardiovascular disease. While there is a clear association between increased fruit and vegetable and decreased cancer risk the impact of eating more fruits and vegetables on weight management has not been widely researched. The existing evidence does support that replacing foods of high energy density with foods of lower energy density, such as fruits and vegetables, can be an important part of a weight management strategy. The role of fruits and vegetables in weight management is based on the following[7]:



- To lose weight a person must eat fewer calories than he or she expends.
- People may not limit what they consume based on calories alone. Feeling full or satisfied is one reason that people stop eating.
- At the same calorie level, foods with low energy density provide a greater volume of food, which may help people feel full at a meal while consuming fewer calories
- Water and fiber increase the volume of foods and reduce energy density. In their natural state, fruits and vegetables have high water and fiber content and thus are low in calories and energy density.
- Fruits and vegetables are good substitutes for foods of high energy density.

Physical Activity

Regular physical activity has been shown to reduce the risk of certain chronic diseases, including high blood pressure, stroke, coronary artery disease, type 2 diabetes, colon cancer and osteoporosis. Physical activity is defined as any bodily movement produced by skeletal muscles resulting in energy expenditure. In contrast, physical fitness is a multi-component trait related to the ability to perform physical activity. Maintenance of good physical fitness enables one to meet the physical demands of work and leisure comfortably. People with higher levels of physical fitness are also at lower risk of developing chronic disease. Conversely, a sedentary lifestyle increases risk for overweight and obesity and related chronic disease.[8]

The Guide to Community Preventive Services[9] recommends the following interventions with strong evidence to increase physical activity: community wide campaigns, "point-of-decision" prompts, individually-adapted health behavior change, school based physical education, non-family social support, and the creation and/or enhanced access to places for physical activity combined with informational campaigns. Additionally, reviews of interventions related to transportation policy and infrastructure changes to promote non-motorized transit and urban planning approaches (zoning and land use) are in progress.

Television Time

National cross-sectional surveys have shown a positive association between the number of hours children watch television and prevalence of overweight. The mechanisms for the relationship between television time and overweight have not been clearly determined. Proposed mechanisms include: television watching may displace physical activity, children may have increased caloric intake while watching TV, children who watch more television may be influenced by advertisements to request, buy or consume more high calorie foods and more snacks and TV viewing may reduce metabolic rate.

Studies have also linked television use to factors in the family and the home. Children who have a television in their bedroom spend more time watching television. Children who live in a home where the TV is on all the time, and those who spend more than half of their TV time watching alone tend to watch more. Parental behavior also is associated with TV time. Children watch less TV if they have parents who watch less television themselves, monitor TV closely, are more consistent in TV viewing rules and know more about the media and media effects.[10]

Additionally, the plan includes objectives related to the dietary determinants of energy imbalance. Although the evidence on effective dietary strategies is limited, it is important to consider the contributions of dietary fat, dietary fiber, calcium and dairy, macronutrients and satiety, energy density, sweetened beverages, fast food and restaurant use, and family and parental involvement, in designing and implementing interventions to prevent or manage overweight and obesity.

connection to healthiest wisconsin 2010 & other plans

KidsFirst:
The Governor's Plan to Invest in Wisconsin's Future

KidsFirst[12] is a comprehensive agenda to invest in Wisconsin's future by improving the lives of the state's children. The plan outlines Governor Doyle's priorities to make sure children are ready for success; are safe at home, in school and in their communities; have the opportunity to be raised by strong families; and grow up healthy. The plan includes a wide range of initiatives, public-private partnerships, legislative proposals, budget priorities that were developed in an unique collaboration of the Governor, First Lady, School Superintendent, and the secretaries of the Departments of Health and Family Services, Workforce Development and Corrections.

The fitness and nutrition initiatives include:

- Encourage young people to complete the Governor's Challenge, a fitness program that allows participants to log their activity online.
- Promote healthy lifestyles through the Healthy Kids website, providing students and parents information on health, fitness, and links to other useful sites.
- Implement recommendations from the Governor's Council on Physical Fitness and Health, which is working to promote fitness and nutrition, build local coalitions, and develop innovative health policy focused on Wisconsin kids.

It was important in the development of the Nutrition and Physical Activity State Plan that it build on and include the work of other plans and not to duplicate or negate this work. Among these plans include Healthiest Wisconsin 2010 (the state health plan), KidsFirst: The Governor's Plan to Invest in Wisconsin's Future, the Wisconsin Bicycle Transportation Plan 2020, and Connections 2030. Additionally, the other chronic disease programs that had or were in the process of developing strategic plans were key resources.

Healthiest Wisconsin 2010: A Partnership Plan to Improve the Health of the Public

Healthiest Wisconsin 2010: A Partnership Plan to Improve the Health of the Public[11] is the Wisconsin state health plan for the decade 2000-2010. The Wisconsin Health Plan for 2010 was developed not only to comply with Wisconsin statutes (s.250.07, Wis Stats), but also to define "public health" and the 12 essential public health services. The document describes the 5 system (infrastructure) priorities and the 11 health priorities that will set the stage for public health programs. By concentrating efforts on these priorities, as well as following the mission of public health and the core values, the public health system partners will be able to achieve the identified public health vision — Healthy People in Healthy Wisconsin Communities.

Two of the eleven health priorities identified in the health plan are *Adequate and Appropriate Nutrition and Overweight, Obesity and Lack of Physical Activity*. Implementation plans were developed for each of these priority areas. The Wisconsin Partnership for Activity and Nutrition used this work as a framework then incorporated new strategies that have been identified as more evidence has become available and to broaden the strategies to encompass multiple levels of the social-ecological model. Because this plan

is focused specifically on overweight and obesity prevention through improved nutrition and physical activity it contains more detailed strategies, objectives and action steps and complements the state health plan. It should be noted that the Healthiest Wisconsin 2010 plan does address areas of nutrition that are not included in this plan, such as public health nutrition workforce development, food security, and safe food supply.

Wisconsin Bicycle Transportation Plan 2020

The Wisconsin Department of Transportation (WisDOT) encourages planning for bicyclists at the local level and is responsible for developing long-range, statewide bicycle plans. Guidelines for accommodating travel by bicycles when roadways are reconstructed, or new roads are built, are available and their use is encouraged. The development of WisDOT's statewide long-range bicycle plan, *Wisconsin Bicycle Transportation Plan 2020*[13], involved many people, including an advisory committee. This bicycle planning document is intended to help both communities and individuals in developing bicycle-friendly facilities throughout Wisconsin.

Connections 2030

Connections 2030 is the statewide long-range transportation plan through the year 2030. The plan addresses all forms of transportation: highways, local roads, air, water, rail, bicycle, pedestrian, and transit. It includes ways to make the individual modes work better as an integrated transportation system. Connections 2030 is a policy-based plan. The policies are tied to "tiers" of potential financing levels. One set of policy recommendations focuses on priorities that can be accomplished under current funding levels. Another identifies policy priorities that can be achieved if funding levels increase. Finally, WisDOT also identifies critical priorities that must be maintained if funding were to decrease.

In addition to policies related to each transportation mode, Connections 2030 includes recommendations on cross-cutting issues such as economic development, land use, transportation finance and the environment. Connection 2030 serves as the statewide blueprint for future transportation decisions.

Chronic Disease State Plans

The Division of Public Health includes programs targeted toward preventing and managing specific chronic diseases and behaviors that increase risk of chronic diseases. These programs have developed comprehensive state plans. During the development of the Nutrition and Physical Activity State Plan, it was important to consider strategies and objectives that "cross-cut" programs and plans to assure consistent messages. Nutrition and physical activity or healthy lifestyle objectives are prominent in the prevention of diabetes, cardiovascular disease and certain cancers and are included in each respective plan. As each of these state plans is being implemented it will be critical for ongoing collaboration to maximize opportunities, avoid duplication of effort and to efficiently utilize resources. The overall lead for the activities related to overweight and obesity prevention, improved nutrition and increased physical activity will come from the Nutrition and Physical Activity Program, the Wisconsin Partnership for Activity and Nutrition and this State Plan.

partnership opportunities

Statewide Coalitions and Partner Groups

The Nutrition and Physical Activity Program staff lead or collaborates with several coalitions, councils and partner groups with missions that support the objectives in this plan. This network of partners will continue to expand and strengthen as the plan is implemented. Below is a listing of some of the key statewide partnerships:

- Cardiovascular Health Alliance
- Comprehensive Cancer Control Steering Committee
- Diabetes Advisory Group
- Governor's Bicycle Council
- Governor's Council on Physical Fitness and Health
- Wisconsin 5 A Day Coalition
- Wisconsin Action for Healthy Kids Coalition
- Wisconsin Breastfeeding Coalition
- Wisconsin Cancer Council
- Wisconsin Food Security Consortium
- Wisconsin Nutrition Education Network

Program Integration

In late 2003, the Division of Public Health chronic disease programs formed an internal working group to provide opportunities for programs to work together in new ways to improve program impact. The Program Integration group promotes communication, collective thinking, and problem solving about crosscutting issues, such as risk factor reduction. Many advocacy and community-based organization representatives serve on program partner groups, sometimes multiple partner groups. The group has expanded over time and currently the programs represented on this internal group include:

- Arthritis Program • Asthma Program • Bureau of Health Information & Policy
- Cardiovascular Health Program • Comprehensive Cancer Control Program
- Diabetes Prevention and Control Program • Health Information
- Injury Control Program • Management • Maternal and Child Health
- Medical Officer • Minority Health • Nutrition and Physical Activity Program
- Oral Health • Prevention Block Grant • Primary Health Care Services
- Tobacco Prevention and Control Program • Well Woman Program

One of the first efforts of this group was a joint advocacy and public policy subcommittee. This subcommittee brought together voluntary advocacy group and community-based organization representatives from several of the program partner groups to discuss collaborative advocacy efforts. Nutrition and physical activity was identified as a common priority and a Joint Statement on Nutrition and Physical Activity was developed and is endorsed by over 40 internal and external programs and organizations.

Nutrition and Physical Activity Coalitions

Wisconsin has over 40 local community coalitions working on initiatives to reduce overweight and obesity, improve nutrition and increase physical activity. These local coalitions are a critical piece in the infrastructure that is needed for this plan to have an impact. As we know people live, work and play in communities. Research has shown that behavior change is more likely to happen and be maintained when the environment and social norms are supportive.

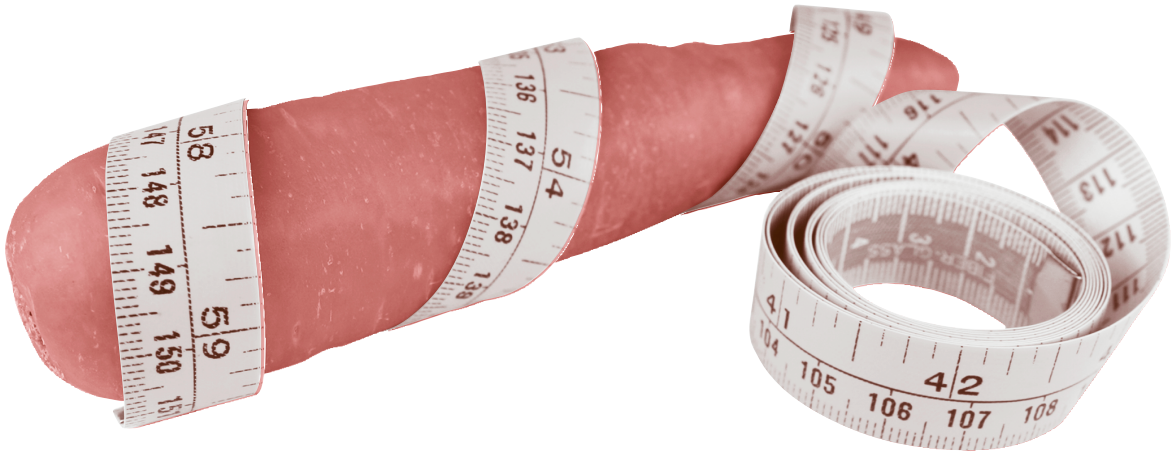
Healthier Wisconsin Partnership Programs

In 1999, Blue Cross & Blue Shield United of Wisconsin announced its intention to convert to a stock insurance corporation and to dedicate the proceeds from that conversion to improving the health of the public. As a result of the conversion process, Wisconsin's two medical schools, the Medical College of Wisconsin and the University of Wisconsin Medical School, established permanent endowments for the benefit of the people of the state of Wisconsin. The Healthier Wisconsin Partnership Program is a component of the endowment fund at the Medical College of Wisconsin. The Wisconsin Partnership Fund for a Healthy future is the University of Wisconsin Medical School counterpart program. The vision for these programs is to improve the health of the people of Wisconsin. The Partnership Programs support community-medical school partnerships that address public and community health improvement.

In 2004, during the first year of the community grant programs over 9.8 million dollars was awarded to community-based organizations for 1-year planning grants and 3-year infrastructure grants. Of these awards over 2.5 million dollars were for interventions focused on obesity prevention and management, improved nutrition and increased physical activity. The Partnership Program will continue to provide valuable support to the implementation of this plan.

other influences

In addition to the other plan and partnership opportunities discussed above there are other influences that may influence the implementation of this plan. These include, but are not limited to, state and local budgets that are prompting spending cuts in various sectors, hiring freezes and position cuts and re-allocation of resources. The Wisconsin Division of Public Health recently completed a reorganization in which the Bureaus of Family and Community Health and Chronic Disease was combined into one Bureau of Community Health Promotion. This has been a positive influence as the Nutrition and Physical Activity Program is in the same bureau with the other chronic disease program. This has allowed for better communication, coordination, collaboration among the programs. Another potential influence is a proposed Public Health Institute. This is still in the incubator stages and as such the likely influence on this plan is unknown.



updating the plan

This plan will continue to evolve as more evidence and research on the prevention and management of overweight and obesity becomes available, as successes are realized and other influences are discovered. The Nutrition and Physical Activity Program and the Wisconsin Partnership for Activity and Nutrition will provide regular updates on the progress made on the goals and objectives in the plan including recommendations for any changes to the plan objectives. These reports will be posted on the Nutrition and Physical Activity Program website. Many of the objectives in the plan are for a 3-5 year timeframe after which it will be necessary to undergo another planning process to keep the plan current and moving Wisconsin toward the longer range goals of reducing the incidence of overweight and obesity.

the plan: goals, strategies & objectives

impact on key indicators

The plan is designed to reduce overweight, obesity and related chronic diseases in Wisconsin over the next ten years. The impact of these efforts will be measured by changes in weight status, including overweight and obesity, and physical activity indicators. Setting the target levels to monitor the success of the plan was difficult due to the ambiguity and lack of research on how to set target goals in this area. For overweight and obesity the current trend is increasing at a steady rate, whereas the rate of physical activity has remained fairly constant over time. In order to reduce overweight and obesity the trend needs to be stopped and reversed, similar to the analogy of stopping a moving train. Significant effort from all sectors is needed and the work needs to be done in concert rather than in "silos" of activity. Much thought and discussion occurred around what the available data indicates about current health status, what is achievable and realistic, yet striking a balance between providing a challenge towards accomplishing and achieving the target. As a result of these deliberations, the following approaches were used to determine the outcome indicators that will allow us to measure the impact of the plan over the next ten years.

- Accept the related Healthy People 2010 objective as the 2015 objective
- Project the Healthy People 2010 objective to 2015
- Better than the best, where Wisconsin is compared to other states with the target being set at the level of the state with the "best" rank.
- Improvement based on projection of trends to 2015[14]

The targets for overweight and obesity have been combined because a decrease in obesity rates will increase overweight rates as the curve shifts. At this time Wisconsin does not have a system in place to collect weight status data for children ages 6-12, so a developmental goal was set based on the Healthy People 2010 goal.

State Plan 2015 Outcome Indicators

- By 2015 decrease the percentage of adults who are overweight and obese (BMI $\geq$ 25) from 60% to 45%.
- By 2015 decrease the percentage of high school youth who are at risk of overweight or overweight (BMI-for-age $\geq$ 85th percentile) from 24% to 12%.
- By 2015 decrease the percentage of children ages 6-12 who are at risk of overweight or overweight (BMI-for-age $\geq$ 85th percentile) to 15%. (developmental)
- By 2015 decrease the percentage of children ages 2-4 who are at risk of overweight or overweight (BMI-for-age $\geq$ 85th percentile) from 29% to 15%.
- By 2015 increase the percentage of adults who meet the recommended guidelines for moderate physical activity from 54.6% to 59%.[1]
- By 2015, increase the percentage of high school youth who meet the recommended guidelines for moderate physical activity from 28% to 42%.[2]

The data represents adults with 30+ minutes of moderate physical activity on five or more days per week or vigorous physical activity for 20+ minutes three or more days per week.

The data represents youth with at least 30 minutes of moderate physical activity on five or more days per week.

Implementation Goals, Strategies, Objectives and Action Steps

The plan outlines seven goals with corresponding strategies, objectives and action steps to achieve short, medium and long term process and outcome measures. They represent a broad range of activities that will allow for a comprehensive, multi-faceted approach for improving nutrition, increasing physical activity and ultimately reducing overweight, obesity and related chronic diseases. The strategies and objectives are based on the current evidence, best practice and promising strategies that were available at the time of the plan development. Recognizing that new evidence is evolving rapidly and that each organization and community has a different capacity for implementation, these goals, strategies and objectives should serve as a guide to spur discussion, understanding and to aid in the selection of appropriate interventions and initiatives. With this plan, we believe that together we will reduce the impact of overweight and obesity in Wisconsin.

Goals, strategies, objectives and action steps are listed on the on following pages...

goal 1

Strengthen and sustain the statewide nutrition and physical activity infrastructure to prevent and manage obesity and related chronic diseases.

Vision 2015

State and local partners will be engaged and organized to work in a coordinated manner. Regular communications through a website, listserve, e-mails and mailings will result in sharing of successful, evidenced-based programs that create the greatest local impact.

strategy 1

The Nutrition and Physical Activity Program will provide leadership and support for the implementation of strategies to prevent and control obesity.

1.1.1 *By 2010, the Nutrition and Physical Activity Program activities will facilitate the implementation of evidence-based interventions at the coalition level.*

- Provide technical assistance to statewide initiatives/interventions that promote healthy eating, physical activity and healthy weight.
- Develop issue papers/briefs/position statements to highlight the importance of consistent healthy eating and physical activity messages and the importance of supportive environments related to health issues.
- Provide resources and technical assistance to local coalitions implementing interventions.
- Encourage the use of theoretical frameworks/conceptual models as a basis for intervention design.
- Promote and support the use of qualified and competent Public Health Nutritionists and fitness professionals in lead roles for state and local interventions.

1.1.2 *By 2006, the Nutrition and Physical Activity Program will coordinate annual regional trainings on coalition infrastructure and capacity building.*

- Provide regular training to coalitions to build capacity and infrastructure including resources for sustaining membership, coalition capacity building/networking, grant writing, and role in the statewide infrastructure.
- Train community coalitions on how to involve and solicit participation from non-traditional partners, such as business and industry, media, healthcare, etc.
- Partner with organizations to provide the trainings based on topic area.
- Provide ongoing technical assistance and consultation to community coalitions.
- Provide information on how to design interventions using social marketing, and evidence-based strategies.

1.1.3 *By 2005, the Nutrition and Physical Activity Program indicators for evidence-based interventions and best practices have been defined and communicated to nutrition and physical activity related coalitions.*

- Identify criteria/indicators and disseminate to coalitions for implementation of best practice/evidence-based interventions, uniform data collection, evaluation, and sustainability.
- Ceate a process for the granting of funding with criteria/indicators clearly identified.
- Identify priorities for state and local interventions.

1.1.4 *By 2005, the Nutrition and Physical Activity Program will complete an inventory of existing nutrition and physical activity initiatives and interventions.*

- Identify and inventory nutrition and physical activity related programs, initiatives and activities currently being implemented in all sectors of Wisconsin.
- Disseminate information about best practices, effective strategies and programs that could be replicated to prevent and manage overweight and obesity.

- Post the nutrition and physical activity interventions on the Nutrition and Physical Activity Program website as a resource to other community groups.
- Utilize the information from the inventory to direct efforts to build and sustain the community coalition infrastructure.
- Conduct the inventory annually.

1.1.5 A *By 2005, the Nutrition and Physical Activity Program will administer a uniform communication system for all coalitions and partners via a website and electronic listserve.*

B *By 2005, 90% of the nutrition and physical activity coalitions will be subscribed to the Wisconsin Partnership for Activity and Nutrition listserve.*

- Support and facilitate communication with (and between) local nutrition and physical activity coalitions through a website, listserve, newsletter and other available technology.
- Design and implement a Nutrition and Physical Activity website and a listserve.
- Market the website and listserve to partners.
- Monitor website and listserve usage regularly and update as needed to maintain effectiveness.

strategy 2

Expand or strengthen the network of community coalitions to implement strategies to prevent and control obesity through improved nutrition and increased physical activity.

1.2.1 A *By 2006, 75% of nutrition and physical activity coalition chairs or their designee(s) will have attended a training session on coalition building.*

B *By 2008, 90% of nutrition and physical activity coalition chairs or their designee(s) will have attended an annual training session on coalition building.*

- Utilize inventory survey results to develop training sessions and resources.
- Promote the trainings on the website and listserve.
- Assess coalition needs and satisfaction and adapt training sessions accordingly.
- Provide opportunities for coalitions to regularly network with each other to assure consistent messages and maximize resources.

1.2.2 *By 2007, increase the number of active community nutrition and physical activity related coalitions to 55.*

- Facilitate partnerships that represent the needs and diversity of each respective community.
- Provide technical assistance to communities and coalitions to start or expand local efforts.
- Implement evidence-based, best-practice strategies to prevent and manage overweight and obesity based on local needs and resources.
- Work with the local public health departments to add questions related to barriers and supports for healthy eating and active community environments to community needs assessments.

1.2.3 *By 2007, 5 coalitions meeting best practice criteria will establish a mentoring program.*

- Identify the characteristics of an effective coalition to identify coalitions as "meeting best practice" criteria. These may include: evidence of providing families and communities with consistent nutrition and physical activity leadership and guidance; training community stakeholders on providing factual nutrition and physical activity guidance and information; diverse coalition membership and having a nutrition and/or fitness professional in a leadership capacity.
- Establish a mentoring program for new or expanding coalitions.

strategy 3

Engage key stakeholders at both the local and state level in efforts to prevent and manage obesity.

1.3.1 *By 2008, all local coalitions will have representation from at least 50% of the key partnerships identified by the coalition to participate in community health improvement processes.*

- Identify gaps in existing partnerships necessary to assure appropriate representation needed for effective strategy implementation.
- Encourage coalitions to initiate and establish partnerships with business and industry, schools, healthcare, public health, city planners and transportation, community organizations and groups, service clubs, faith-based organizations, parks and recreation, law enforcement, media, residents and others as needed to implement strategies.
- Promote "champions" or influential community leaders to promote consistent messages within healthcare organizations, business and industry, schools, professional organizations, and the community.

1.3.2 *By 2007, establish new state level partnerships to assure the appropriate representation needed to implement the Nutrition and Physical Activity Plan.*

- Promote "champions" or influential community leaders to promote
- Identify gaps in existing partnerships necessary to assure appropriate representation needed for effective strategy implementation.
- Promote "champions" or influential community leaders to promote
- Establish or expand state level partnerships to include: mental health, healthcare professionals, fitness professionals, physical therapists, social workers, behavioral therapists, school nurses, federally qualified health care centers, youth programs, employers, food producers/manufacturers, food security organizations, minority populations, and Prevention Research Centers.
- Promote "champions" or influential community leaders to promote Assess attitudes and opinions of major stakeholders/ partners regarding nutrition and physical activity strategies.
- Promote "champions" or influential community leaders to promote Develop model interventions that are evidence-based or promising strategies consistent with the Nutrition and Physical Activity Plan.

goal 2

Develop materials and provide technical support to facilitate consistent messages and initiatives.

Vision 2015

There will be a library of standardized materials that can be shared by all partners to focus efforts on specific objectives using proven interventions to change outcomes. These materials will provide guidance for interventions being done in a community, a health care setting, a business or a school and will also be available at the family and individual level. A master list of policies to impact these settings will also be developed and will include recommendations for areas with health disparities.

strategy 1

Consistent nutrition and physical activity messages will be promoted through a variety of channels such as healthcare providers, insurers, schools, worksites, and media.

2.1.1 *By 2005, the Wisconsin Partnership for Activity and Nutrition will identify key nutrition and physical activity messages to prevent and manage obesity.*

- Meet with community coalitions and other related programs/ organizations to recommend methodologies, materials, resources and how messages would be disseminated.
- Provide and promote consistent, clear, factual messages on healthy eating and physical activity.
- Identify expert panel and/or nationally recognized guidelines for healthy eating, physical activity and management of healthy weight.
- Identify potential nutrition and physical activity related policy changes that will affect and support long-term behavior change.
- Establish nutritional criteria for healthy food choices to be used in public facilities and at events such as fundraisers, fairs and festivals.
- Provide access to nutrition and physical activity information and resources via the Nutrition and Physical Activity listserve and website.
- Adapt or design culturally appropriate nutrition and physical activity messages.
- Identify and/or develop and disseminate a checklist or tool to assure consistent messages across the varying sectors and organizations within the state and community.
- Utilize social marketing principles to tailor effective nutrition and physical activity messages for target populations.

strategy 2

Develop and disseminate materials to support the implementation of identified nutrition and physical activity strategies.

2.2.1 *By 2006, the Wisconsin Partnership for Activity and Nutrition will release "briefs" to highlight how important supportive nutrition and physical activity environments are to a healthy lifestyle.*

- Develop and disseminate brief(s) to address the importance of nutrition and physical activity in preventing and managing overweight and obesity and related chronic diseases; the importance of family centered meals and daily physical activity.
- Develop and disseminate brief(s) targeted toward policy and decision makers.
- Identify and/or develop materials to be used in social marketing campaigns in coordination with interventions to support the brief(s).

2.2.2 *By 2006, the Wisconsin Partnership for Activity and Nutrition will develop and disseminate a toolkit showing the return on investment associated with promotion and support of nutrition and physical activity strategies for worksites.*

- Gather input from key business leaders regarding needed information to garner buy-in either by use of an inventory survey, focus groups or a summit.

- Collaborate with businesses, professional organizations, unions and other stakeholders to develop a resource toolkit that includes business motivators, samples of successful programs, cost effectiveness information, model interventions for various types/sizes of business/industry; how to modify to fit the workplace situation and an evaluation component.
- Collaborate with other chronic disease programs to implement worksite health promotion programs.
- Develop a distribution and marketing plan to promote the use of the toolkit.

2.2.3 *By 2007, the Wisconsin Partnership for Activity and Nutrition will develop and disseminate a toolkit with guidelines and tools for healthcare providers to implement a systems approach to healthcare for obesity prevention, assessment and management.*

- Create an easy to use assessment and counseling tool(s) incorporating the expert panel guidelines, for usage by medical staff during patient/client visits for adults, adolescents and children.
- Promote a systems approach for obesity prevention and management.
- Identify and/or develop tools needed to implement a systems approach to care.
- Develop and disseminate education materials to providers and consumers to promote the importance of improved nutrition and increased physical activity in the self-care management model.
- Identify providers who specialize in providing nutrition and physical activity related services and make available to practitioners for referral.
- Utilize a variety of methods and technology to disseminate information related to guidelines, pertinent policies, counseling techniques and systems applications to healthcare providers.
- Facilitate provider/staff training on supporting behavior change in the healthcare environment which includes role modeling, the systems approach to providing care and self-management model.
- Provide ongoing training opportunities that include education on key messages for ages/stages (conditions) on healthy eating, activity and body weight as an issue of health, not appearance.

strategy 3

Provide training and education needed to support the implementation of identified nutrition and physical activity strategies.

2.3.1 *By 2010, Wisconsin medical and allied health professional training programs will include information on obesity prevention and management.*

- Promote the inclusion of information on obesity prevention and management in training programs for physicians, physician assistants, nurse practitioners, nurses, physical therapists, exercise physiologists and dietitians.
- Review existing curricula and work to add or expand to meet a minimum competency level.
- Incorporate information on the benefits of preventing overweight/obesity, client-centered counseling skills, the provider role and the role/expertise of other healthcare professionals (Registered Dietitian, exercise physiologist, physical therapist), and how/when to refer to these professionals into curricula.

2.3.2 *By 2008, 200 Registered Dietitians will have completed the American Dietetic Association's weight management training certificate program for children and adolescents and/or adults.*

- Market and promote training via Wisconsin Dietetic Association listserve and website.
- Create a statewide registry of registered dietitians who have completed certificates of training in weight management; post link to program on website.
- Explore the feasibility of sponsoring the certificate program at a Wisconsin site.

2.3.3 *By 2006, increase the proportion of healthcare providers that routinely screen for overweight and obesity among children, adolescents and adults.*

- Survey healthcare providers to assess current practices related to screening for overweight, obesity, and physical activity.
- Include screening for eating and physical activity behavior patterns during all patient visits that include an exam and initiate counseling on healthy weight and physical activity using established guidelines.
- Offer point of service prompts for providers.

2.3.4 *By 2010, university pre-service and continuing education programs for teachers will include information on how healthy food choices and physical activity affect student performance and health.*

- Conduct an inventory of the existing programs to determine the current level and accuracy of information included.
- Provide university pre-service training and ongoing continuing education on physical education that encourages maximum activity for all participants during PE class (i.e. promote non-competitive PA, example: "Physical Best"), nutrition education standards and curriculum guide and assessment tools.
- Provide training to teachers on the nutrition education standards, curriculum guide and curriculum assessment tool in support of identified strategies through pre-service and continuing education offerings.

2.3.5 *By 2008, the Nutrition and Physical Activity Program and its partners will provide trainings needed to implement effective services and interventions.*

- Develop a mechanism to track the number, type and attendance at conferences and trainings related to implementation of the state plan and its objectives.
- Assess the level of competency of School Food and Nutrition Staff and develop a plan to upgrade competencies as deemed necessary.
- Update the school food service Professional Improvement Plan (PIP).
- Provide trainings to healthcare providers, school personnel, consumers, community-based organizations, transportation and city planners and others as identified.

goal 3

Create environments that support and promote healthy eating, daily physical activity and a healthy weight.

Vision 2015

Trainings will be held statewide to educate key players that influence the environment. These trainings will result in a better awareness of the role the environment plays in improving nutrition and physical activity opportunities and assessments of local environments to identify areas of change. Resource materials will provide a blueprint on how to affect environmental factors through policies and local practices that encourage people to practice healthy eating habits and an active lifestyle.

strategy 1

Assess the existing state and local nutrition and physical activity environments.

3.1.1 A *By 2006, 10 communities in Wisconsin will conduct an environmental audit to identify support and barriers to physical activity within their community.*

B *By 2008, 30 communities in Wisconsin will conduct an environmental audit to identify support and barriers to physical activity within their community.*

C *By 2010, 50 communities in Wisconsin will conduct an environmental audit to identify support and barriers to physical activity within their community.*

- Conduct trainings that link land use, transportation, physical activity, and health.
- Choose/develop the audit tool to assess the supports and barriers to physical activity (e.g. bikeability/walkability).
- Conduct environmental audit in communities.
- Review transportation policies and traffic patterns to identify policies and practices that don't support safe walking and biking.
- Analyze results and share with policy makers and the general public. Link to community health and planning data (e.g. minutes of activity/day, Smart Growth plans).

3.1.2 A *By 2006, 10 communities in Wisconsin will conduct an environmental audit to determine the number and location of outlets for fruits and vegetables.*

B *By 2008, 30 communities in Wisconsin will conduct an environmental audit to determine the number and location of outlets for fruits and vegetables.*

C *By 2010, 50 communities in Wisconsin will conduct an environmental audit to determine the number and location of outlets for fruits and vegetables.*

- Choose/develop the audit tool to assess the availability of various forms of fruits and vegetables at accessible locations.
- Conduct audit in communities.
- Identify areas of the community that do not have access to a full service grocery, farmers' markets, community supported agriculture (CSA) or farmstands, or community gardens.
- Identify community policies or practices that do not support fruit and vegetable consumption.
- Identify populations/subgroups with limited or poor access to fruits and vegetables.
- Analyze results and share with policy makers and the general public. Link to community health data (i.e. consumption of fruits & vegetables, healthy eating index, chronic disease morbidity or mortality rates).

strategy 2

Increase awareness and access to opportunities that promote healthy eating, physical activity and a healthy weight.

3.2.1 *By 2006, 200 community leaders who participate in "Creating Healthy Community Environments" trainings will demonstrate an increased knowledge of the link between land use, transportation and health.*

- Assess current knowledge of community leaders.
- Conduct a train the trainer session for the "Creating Health Community Environments" training.
- Plan and conduct regional/community trainings based on the assessment.
- Assess pre and post training community leaders' knowledge of the link between land use, transportation, physical activity, eating habits and health.

3.2.2 *By 2008, 25 coalitions or communities will publish and disseminate a resource guide of community resources that support an active lifestyle and healthy eating habits.*

- Develop a template for community resource guides to promote nutrition and physical activity.
- Assess community resources that support an active lifestyle and healthy eating habits to be included in the resource guide.
- Compile and publicize a listing of existing facilities that provide safe, inclusive and affordable opportunities for physical activity.
- Compile and publicize a listing of existing farmers' markets, CSAs, farm stands and full service grocery stores in the county to encourage consumption of fruits and vegetables.

strategy 3

Make environmental changes to promote and support healthy eating, daily physical activity and a healthy weight.

3.3.1 A *By 2006, increase by 5% the number of farmers' markets, farm stands and Community Supported Agriculture farms throughout the state.*

B *By 2008, increase by 10% the number of farmers' markets, farm stands and Community Supported Agriculture farms throughout the state.*

- Determine the number of CSAs, farmers' markets and farmstands in the state
- Promote the creation of Farmers' Markets and the development and use of CSAs and farm stands through the WIC and Senior Farmers' Market Program, local nutrition coalitions and policy makers.
- Establish and support garden to table programs.
- Assess and improve the ability of food stamp recipients to utilize their food stamps to purchase fruits and vegetables from farmers' markets, CSAs or farm stands.
- Work with policymakers, farmers, business leaders and the general community to bring farmers' markets, CSAs & farmstands to areas in need.

3.3.2 *By 2007, 10 communities will make one improvement to their community's access to fruits and vegetables based on their community's environmental audit.*

- Work with policymakers, business leaders, the Wisconsin Grocer's Association and the general community to bring full service grocery stores to areas in need.
- Identify and share best-practices for increasing access to fresh fruits and vegetables with local communities.
- Promote existing community supported agriculture entities via the Nutrition and Physical Activity website.
- Connect and partner with the Department of Agriculture, UW-Extension Horticulturists and the Wisconsin 5 A Day Coalition.

3.3.3 *By 2007, 10 communities will make one improvement to their community's walkability/bikeability based on their community's environmental audit.*

- Conduct environmental audits and identify practices that reduce the community's bikeability or walkability including "pedestrian mobility routes" for persons with disabilities.
- Work with policymakers and the general community to identify changes they will agree to make to improve the community's walkability & bikeability.
- Implement agreed on policy changes via new ordinances or enforcement of existing ones.
- Connect with the Department of Transportation 30-year plan and the Smart Growth plan.

3.3.4 *By 2006, 5 communities will establish a Safe Routes to School Program.*

- Assess the number of schools in Wisconsin that promote children walking or biking to school through a safe routes program or via other means.
- Disseminate promotional materials for Safe Routes to School programs/routes.
- Identify funding/resources to increase the number of children who walk/bike to school.
- Share successes at various events such as Creating Active Community Environments, at school related trainings/conferences, community nutrition and physical activity coalitions.
- Encourage school involvement in land use and how siting of schools or walking and biking routes to school can promote and encourage physical activity.

3.3.5 *By 2008, increase the number of people that utilize physical activity facilities that are available and accessible to the general public.*

- Incorporate questions related to access to physical activity facilities into environmental audits or community needs assessments.
- Assess if there are specific populations in the community without access to physical activity facilities and what the barriers are that prevent access.
- Partner/enlist schools, places of worship, shopping malls and other facilities in exploring options for before/after hours use.
- Meet with organizational boards/leadership to develop policies and procedures for use of available facilities; develop plan for shared use, identify ways to bring in resources to support community use.
- Initiate walking clubs for people of all ages and abilities.

Goal 3: strategy 3 *continued...*

- Encourage membership fees to fitness clubs/facilities that are offered on a sliding-fee scale based on income.
- Encourage health insurance companies to supplement the cost or create an incentive for individuals/families to join/utilize fitness clubs.

3.3.6 A *By 2006, 50% of the Metropolitan Planning Organizations (MPOs) will adopt physical activity friendly transportation policies.*

B *By 2009, 100% of the Metropolitan Planning Organizations (MPOs) will adopt physical activity friendly transportation policies.*

- Create a list of MPOs in Wisconsin.
- Define and promote physical activity friendly policies.
- Identify model MPOs to serve as a best practice example.
- Develop a model resolution for the MPOs to adopt.
- Advocate for the adoption of the model resolution.
- Engage community leaders/decision makers to become involved in the comprehensive planning process.
- Identify MPOs that have not adopted activity related transportation policies.
- Circulate the model resolution developed.

3.3.7 *By 2008, communities will utilize the nutrition criteria established by the Wisconsin Partnership for Activity and Nutrition when selecting healthy food and beverage choices available in public spaces.*

- Identify health and other leaders in government to take a leadership role in educating governing boards on how vending choices impact health.
- Utilize nutrition and other key community groups to advocate with their board members to support access to healthy food and beverage choices.
- Identify nutrition experts willing to work with governing boards to identify healthier choices or pricing options for facility food and beverage selections.
- Draft and bring forth a resolution to assure vending machines and other food outlets provide healthy options for both employees and the public.
- Encourage public participation at meetings to support healthy food and beverage choices.

3.3.8 *By 2006 increase the number of restaurants that offer and identify healthy eating options by 25%.*

- Collaborate with the Wisconsin Restaurant Association's Healthy Lifestyles Initiative.
- Encourage restaurants to identify calorie and nutrient content of menu items.
- Provide technical assistance to restaurants to develop healthy choices or alternatives for children and adults such as portion size options, fruit or vegetable sides, preparation choices, and promotional strategies.

Develop and implement a comprehensive policy agenda to affect positive change.

Vision 2015

Participants will be provided information on policies that have been proven to make a difference. Incentive and award programs will be established to encourage policies that support healthy eating and an active lifestyle. A coordinated policy initiative will be developed based on a consensus of partners.

strategy 1

Establish and mobilize an infrastructure to conduct advocacy activities.

4.1.1 *By 2006, the Wisconsin Partnership for Activity and Nutrition will develop an infrastructure to support public policy and advocacy efforts.*

- Broaden representation on the Public Policy and Advocacy committee to better reflect the membership.
- Assure that there is representation from each of the other committees.
- Establish a communication mechanism for discussion of policy/advocacy efforts.
- Identify organizations with similar interests/missions of moving forward advocacy/public policy in order to build a strong network of supporters.
- Work with advocacy groups to provide an united statement/ policy on common issue areas.

4.1.2 *By 2006, the Wisconsin Partnership for Activity and Nutrition and key partners will develop and disseminate a policy toolkit to local coalitions and key stakeholders.*

- Assess current tools available and augment as necessary.
- Include a section on the cost-benefits of preventing obesity/ improving wellness.
- Disseminate (both hard copy and electronically) toolkits and provide training and technical assistance on toolkit utilization.
- Provide ongoing training and technical assistance, as needed.

strategy 2

Implement policy strategies at a state and local level that impact healthy food choices and a physically active lifestyle.

4.2.1 A *By 2007, 100% of school districts will adopt a K-8 policy of 3 physical education classes per week of which 2 are taught by a certified Physical Education teacher.*

B *By 2010, 100% of school districts will adopt policies requiring a minimum of 150 minutes of physical education per week for K-5 students and 225 minutes per week for 6-12 students through school-based or homework activities.*

- Evaluate DPI survey information on current number of schools meeting this strategy.
- Include the strategy in any broad initiatives such as the Governor's School Health Award Program.

4.2.2 *By 2006, all schools participating in the USDA School Lunch and/or School Breakfast Program will adopt a school wellness policy that includes goals for nutrition education, physical activity and guidelines for all foods available on the school campus.*

- Encourage school districts to access a qualified nutrition professional to assist with creating a healthy school nutrition environment for all students.
- Collaborate with the Wisconsin Dietetic Association to identify nutrition professionals who are available to support efforts to improve the school nutrition environment.
- Form or expand a school health council that is comprised of, at a minimum, parents, students, school foodservice, school board, school administrators, teachers, physical education staff, public health, local nutrition and physical activity coalitions, and community members.
- Develop policies and recommendations that increase school breakfast and school lunch program participation.
- All food and beverages available on school campuses and at school events contribute toward eating patterns that are consistent with the Dietary Guidelines for Americans.
- Promote the concepts of the school wellness policy and council to daycare centers to improve their nutrition environment.

4.2.3 *By 2010, increase the number of health insurance providers that provide coverage for prevention, assessment and management of overweight and obesity for children, adolescents and adults.*

- Implement the obesity prevention and management model developed through the pilot intervention.
- Target efforts at insurance providers for the state government, university system and large employers.

4.2.4 A *By 2007, the major healthcare plans and Wisconsin Medicaid will partner with the Wisconsin Partnership for Activity and Nutrition to identify and disseminate expert panel guidelines for prevention,assessment and management of overweight and obesity.*

B *By 2008, the major healthcare plans and Wisconsin Medicaid will partner with the Wisconsin Partnership for Activity and Nutrition to identify recommendations to improve prevention, assessment and management of overweight and obesity for children, adolescents and adults.*

C *By 2009, the major healthcare plans and Wisconsin Medicaid will implement the expert panel guidelines for the prevention, assessment and management of overweight and obesity for children, adolescents and adults.*

- Review current obesity prevention and management policies for children, adolescents and adults and make recommendations for revision.
- Identify potential for policy incentives in managed care contracts to cover weight management and prevention services for children and adults.
- Provide current information on the availability and utilization of expert panel guidelines for overweight and obesity prevention and management.
- Incorporate use of expert panel guidelines in contracts and trainings.
- Utilize the healthcare toolkit to build awareness and consensus among healthcare providers and organizations on the need for using consistent, evidenced-based guidelines for obesity prevention and management.

4.2.5 *By 2007, increase the number of businesses who have implemented worksite health promotion policies.*

- Utilize the business toolkit to build awareness and consensus among businesses on the need for worksite wellness programs and policies.
- Promote use of guidelines for offering healthy foods at meetings, seminars and catered events.
- Incorporate breastfeeding promotion and support into worksite health promotion programs and policies.

4.2.6 *By 2010, increase the number of state and local policies that affect overweight/obesity prevention and management that have been adopted or expanded.*

- Inventory the current state and local policies to determine baseline and track new policies implemented and expanded.
- Identify and disseminate state and local policy strategies around the following issues:
  - Promotion and support of breastfeeding
  - Physical activity/education for all children and adolescents
  - Access to healthy food choices at schools, worksites and public events/spaces
  - Access to facilities (bike trails, walking paths) for physical activity
  - Community and transportation planning to encourage, support and provide opportunities for daily physical activity
  - Collection of surveillance data related to nutrition and physical activity measures and outcomes
  - Access to nutrition and physical activity services to prevent and manage overweight and obesity
  - Identification/screening for overweight and obesity
  - Coverage for weight management and wellness services by Medicaid/Medicare and private insurers for children and adults
  - Self-care management
  - Access to adequate and appropriate nutrition (food security)
  - Participation in nutrition assistance programs such as: WIC, School Breakfast, School Lunch, Child and Adult Care Food Program (CACFP), Summer Food Service Program (SFSP), Special Milk Program (SMP), Food Stamps, WIC and Senior Farmers Market Nutrition Program

strategy 3

Advocate for funding to support the implementation of strategies to prevent and manage obesity through improved nutrition and increased physical activity and improved access and coverage of obesity prevention and management services.

4.3.1 *By 2010, increase public and private funding for facilities enhancements to promote and support an active lifestyle.*

- Utilize community assessments to identify the need for facilities that promote and support an active lifestyle.
- Identify current sources and amounts of funding for facility enhancements.
- Pursue grant and other funding options to enhance facilities.

4.3.2 *By 2010, secure adequate funding for community-based nutrition and physical activity professionals in every community to implement and support initiatives and interventions that support healthy eating and an active lifestyle.*

- Funding for state, regional and local health department staff.
- Funding for nutrition professionals in the Cooperative Education Service Agencies (CESA) to support school-based nutrition activities and curriculum.
- Funding for staff in childcare centers and family day care homes to support community-based nutrition activities and curriculum.
- Coordinate with the Partnership for Dietetic Opportunities in Public Health Nutrition workgroup.

4.3.3 *By 2006, increase the public and private funding to support the implementation of the Nutrition and Physical Activity state plan.*

- Advocate for funding at all levels necessary to support the identified strategies.
- Provide information to key policymakers, program administrators, community and civic leaders, and business leaders on nutrition and physical activity related issues, concerns, and funding needs
- Raise public awareness about potential solutions and funding needs
- Encourage evaluation of nutrition and physical activity interventions to demonstrate program effectiveness
- Encourage collaboration between state chronic disease programs, other state and local agencies, university researchers, and organizations to pool resources
- Advocate for funding at all levels necessary to support the identified strategies

goal 5

Increase the coordination of interventions and the number of evidenced-based or best practice interventions that are implemented.

Vision 2015

There are many nutrition and physical activity interventions occurring in Wisconsin. Some of those interventions are not well coordinated with other activities and some have a lesser impact because of the type of intervention. By 2015, there will be a state website that will provide access to information that shares what is going on locally and statewide. This will result in more effective programs because of better coordination and linking of local, regional and state initiatives and resources. Local partners will be able to focus their resources for programs using information and templates provided by the State that are based on proven evidenced-based or best practice interventions. These materials will provide specific information about how to create change at several levels: individual, interpersonal, organizational, community, and policy.

strategy 1

Promote and support exclusive and sustained breastfeeding as the norm in infant feeding.

5.1.1 *By 2006, 75% of infants will be breastfed in the early post-partum period.*

5.1.2 *By 2007, 50% of infants will be breastfed for at least 6 months.*

5.1.3 *By 2008, 20% of infants will be exclusively breastfed for at least 6 months.*

5.1.4 *By 2010, 25% of infants will be breastfed at least 12 months.*

5.1.5 *By 2008, 10 hospitals will have adapted the "Ten Steps to Successful Breastfeeding".*

- Implement the "Using Loving Support to Build a Breastfeeding Friendly Community" plan.
- Expand the breastfeeding peer counseling pilot "Loving Support through Peer Counseling" initiative.
- Establish worksite, family and community programs and policies that enable breastfeeding continuation when women return to work.
- Promote "Ten Steps to Successful Breastfeeding" to hospitals and birth centers.
- Provide training to childcare provider using the "How to Support a Breastfeeding Mother: A Guide for the Childcare Center".
- Integrate information on the benefits of breastfeeding, risks of not breastfeeding and skills in breastfeeding counseling into the curriculum for health care professionals.
- Include the promotion and support of breastfeeding as a strategy for overweight/obesity prevention.

strategy 2

Promote consumption of fruits and vegetables among children, adolescents and adults.

5.2.1 *By 2010, increase the number of children who meet the recommendations for fruit and vegetable consumption by 6%.*

- Encourage families to have fruits and vegetables available in the home for snacks and meals.
- Educate parents about the importance of role modeling healthy eating behaviors.
- Promote the involvement of children in meal planning and age-appropriate preparation.
- Promote regular family meals to ensure optimal nutrition.
- Assist schools with competitive pricing strategies, point-of-sale, and peer-to-peer marketing techniques for healthier foods.
- Promote garden/farm to table programs.

5.2.2 *By 2010, 34 % of adolescents will meet the recommendations for fruit and vegetable consumption.*

- Encourage families to have fruits and vegetables available in the home for snacks and meals.
- Promote the use of competitive pricing strategies in schools; pricing fruits and vegetables at a lower-cost.
- Educate parents about the importance of role modeling healthy eating behaviors.
- Promote the involvement of adolescents in meal planning and age-appropriate food preparation.
- Assist schools with competitive pricing strategies, point-of-sale, and peer-to-peer marketing techniques for healthier foods.
- Promote regular family meals to ensure optimal nutrition.
- Promote vending/snack options that include fruits and vegetables.
- Promote garden/farm to table programs.

5.2.3 *By 2010, 28 % of adults will meet the recommendations for fruit and vegetable consumption.*

- Create and maintain a 5 A Day website that provides public access to recipe ideas and tips for increasing fruit and vegetable consumption.
- Promote the importance of family meals as a means for incorporating fruits and vegetables.
- Eliminate barriers to healthy eating by offering appealing, affordable fruits and vegetable choices in cafeterias and vending machines at worksites.
- Encourage the use of point-of-sale fruit and vegetable messages in worksites placed where employees eat.
- Encourage increased accessibility to affordable, convenient fruits and vegetables via grocery and convenience stores and restaurants.

5.2.4 *By 2007, 75% of the WIC Farmers' Market Nutrition Program participants surveyed will report that they consumed more fruits and vegetables due to program participation.*

- Conduct an annual survey of the WIC Farmers' Market Nutrition Program participants.
- Promote the Veggin' Out Program to Wisconsin communities.
- Increase accessibility of the Farmers' Markets to WIC Participants through mobile markets, market open at the WIC site, etc.
- Provide education on the selection, preparation and storage of fresh fruits and vegetables.
- Market the availability of the WIC and Senior Farmers' Market Nutrition Program within the community to increase awareness and participation.
- Monitor redemption rates of the Farmers' Market Program benefits.

5.2.5 *By 2007, increase the number of childcare, school and community gardens.*

- Partner with the Food, Ecosystem, and Education Demonstrations Sites (FEEDS) project to establish baseline numbers for childcare, school, and community gardens in Wisconsin.
- Develop and disseminate the *Got Dirt? Garden Toolkit* to school districts, local nutrition and physical activity coalitions and childcare centers to promote gardening.
- Facilitate regional gardening training to promote the *Got Dirt? Garden Toolkit.*
- Collaborate with UW-Extension Horticulture Agents, and Community/Urban Garden Coordinators, and Master Gardener Associations to provide technical assistance to garden projects.
- Identify partner schools in areas with viable community garden programs.
- Identify resources available to provide guidance to assist in developing gardens.
- Promote the garden to table program.
- Encourage teachers to participate in the salad bowl program to fulfill the required continuing education credits.
- Promote the Wisconsin Homegrown School Lunch Program.

5.2.6 *By 2005, the Wisconsin 5 A Day Coalition will resume functioning as a fully operational coalition.*

- Adopt and implement the Wisconsin 5 A Day Coalition action plan.
- Expand membership in the 5 A Day Coalition. The following members will be sought: grocery store chain owners, fruit and vegetable growers, faith-based organizations, community organizations, public health agencies, media, etc.
- Coalition will meet on a quarterly basis.
- Distribute a 5 A Day resource book to schools, community organizations and faith-based organizations.
- Target efforts to address influences of fruit and vegetable consumption such as age, meals eaten away from home, cost, weight, etc.
- Develop and distribute materials based on the annual theme for national 5 A Day Month (September) to partners for use.
- Connect with local coalitions to encourage the promotion of fruit and vegetable consumption.
- Partner with Wisconsin-based dietetic schools and internship programs to utilize students to assist with coalition goals for increasing fruits and vegetables.
- Seek funding for coalition initiatives; attempt to become a funded state for the Fresh Fruit and Vegetable Snack Program to fund 25 select schools.

strategy 3

Promote consumption of healthy food choices among children, adolescents and adults.

5.3.1 *By 2008, decrease the daily consumption of sweetened beverages among adolescents from 60% to 50%.*

- Provide examples of state and national school district successes with offering healthier food and beverage alternatives.
- Encourage healthier food and beverage choices in schools, workplaces, businesses and public areas ("more healthy, less unhealthy choices").
- Encourage the availability of healthier food choices at community events and fairs.
- Partner with the Wisconsin Beverage Association to encourage the sale of healthier alternatives in schools.
- Assist schools with competitive pricing strategies and peer-to-peer marketing techniques for healthier foods and beverages.
- Encourage the food industry to provide food and beverage portion sizes consistent with the Dietary Guidelines for Americans.

5.3.2 *By 2010, increase the percentage of children and adolescents whose diet meets the Dietary Guidelines for Americans.*

- Determine a method for setting a baseline and monitoring progress.
- Disseminate strategies to local coalitions on how to effectively communicate the Dietary Guidelines and the food guidance system.
- Disseminate comprehensive nutrition education curricula that meet Department of Public Instruction nutrition education standards for grades pre-K through grade 12 in public and private schools.
- Disseminate the "NOUN — It's What You Eat" and "ADVERB — It's How You Eat and Play" Initiatives for healthy eating and physical activity to all schools.
- Encourage school participation in the USDA Team Nutrition program.
- School districts will have access to a qualified nutrition professional to assist with creating a healthy school nutrition environment for all students.
- Identify nutrition professionals who are available to support efforts to improve the school nutrition environment.
- Promote age appropriate feeding practices and family meals.
- Develop practices, activities and policies for childcare centers and after school programs that teach and model healthy nutrition choices and habits.
- Pilot and expand the Fit WIC Learning Center concept.

5.3.3 A *By 2006, 45% of all public and private school food authorities will offer a school breakfast program.*

B *By 2008, 55% of all public and private school food authorities will offer a school breakfast program.*

C *By 2012, 80% of all public and private school food authorities will offer a school breakfast program.*

- Collaborate with the UW Cooperative Extension to educate parents about the value of breakfast for healthy students and further educate low-income parents concerning the availability of free and reduced meal benefits for breakfast.
- Provide training for school food service professionals and school administrators for implementation and enhancement of school breakfast programs utilizing the resources of the Department of Public Instruction and the collaboration with professional organizations.
- Recognize best practices among schools offering school breakfast and promote those practices to all program participants.
- Collect and analyze the school breakfast participation data annually to document progress with program improvements.
- Encourage wellness policy development and implementation to include school breakfast as a healthy choice for students.
- Promote school breakfast as an integral partner with quality education experiences for all students to instructional and building administrative staff.
- Administer Kohl grant funding to schools for program implementation and enhancement as available.
- Promote the elimination of reduced price meals for students to insure these needy students have access to school breakfast without the financial barriers in place for this income level.
- Foster legislative support of school breakfast through attendance and support of the Governor's Council and the Wisconsin Partnership for Activity and Nutrition.

5.3.4 *By 2008, increase the percentage of adults whose diet meets the Dietary Guidelines for Americans.*

- Determine a method for setting a baseline and monitoring progress.
- Develop and disseminate strategies to local coalitions on how to effectively communicate the Dietary Guidelines and the food guidance system.
- Identify and disseminate educational materials for target populations.
- Integrate information from the Dietary Guidelines into key nutrition messages and materials for professionals and consumers.
- Educate individuals, families, and communities about healthy dietary patterns based on the Dietary Guidelines for Americans.

strategy 4

Businesses will promote positive health messages and provide access to employer-sponsored health promotion programming.

5.4.1 *By 2010, increase the number of Wisconsin employers who offer benefit packages and workplace health promotion programs that incorporate healthy eating and physical activity.*

- Determine the baseline for the number of employers who offer benefit packages and/or health promotion programs through an inventory or similar tool.
- Research what is currently available as resources for businesses considering benefit packages and workplace health promotion programs that incorporate healthy eating and physical activity.
- Create and disseminate an easy-to-use toolkit to local businesses and key stakeholders.

5.4.2 *By 2006, the Nutrition and Physical Activity Program will pilot a worksite intervention to prevent and manage obesity.*

- Engage employers and business associations in efforts to prevent overweight and related chronic diseases through insurance benefit packages and promotion of self-care programming.
- Select worksites that will pilot the interventions based on interest, size, and budget, type of worksite, etc. to determine best practices. Consider incentives for participation.
- Develop a self-assessment tool for worksites.

strategy 5

Increase access to and coverage of prevention and management services related to obesity.

5.5.1 *By 2008, at least one health care system will implement and evaluate an intervention to gather evidence that prevention (coverage and self-care) services are cost effective for both the healthcare system and employer and impact obesity and related chronic disease.*

- Explore the feasibility of utilizing incentives for healthcare providers.
- Encourage health systems to provide incentives to patients for participating in healthy eating and physical activities.
- Encourage health systems to provide insurance coverage for registered dietitians and physical activity professionals for nutrition & physical activity counseling.
- Implement a systems approach to providing care in healthcare systems.

5.5.2 *By 2007, the major health insurance plans and Wisconsin Medicaid will identify and begin to implement recommendations to improve coverage for obesity prevention and management services.*

- Utilize diagnosis coding for obesity as a disease in medical billing.
- Incorporate and/or enhance existing nutrition and activity related components of the Medicaid "Health Check" policy, exam requirements and materials.
- Assess the feasibility of a helpline for weight management similar to the tobacco quitline or similar helplines.
- Conduct focus groups to help determine what support services are desired and most effective for plan members.

strategy 6

Implement an award/recognition program for schools, worksites and communities.

5.6.1 *By 2006, the Wisconsin Partnership for Activity and Nutrition and partners will develop a recognition program for schools, worksites and communities.*

- Collaborate with the Governor's Council on Physical Fitness and Health, chronic disease programs and other partners to develop criteria for the recognition programs.
- Collaborate with key partners to promote and disseminate information about the recognition program.
- Evaluate the effectiveness and appeal of the award and recognition program and adjust as needed.
- Incorporate evidence-based, best practice strategies into the criteria when feasible.

5.6.2 A *By 2007, 10 schools will be recognized for their achievements in promoting and supportinga healthy lifestyle.*

B *By 2009, 50 schools will be recognized for their achievements in promoting and supporting a healthy lifestyle.*

- Promote participation in the program through multiple means.
- Publicize the list of previous award winners to encourage further applications.
- Award schools meeting the criteria.
- Adjust criteria as needed to keep current with new evidence.

5.6.3 A *By 2007, 10 worksites will be recognized for their achievements in promoting and supportinga healthy lifestyle.*

B *By 2009, 50 worksites will be recognized for their achievements in promoting and supporting a healthy lifestyle.*

- Research what is currently available as resources for businesses considering benefit packages and workplace health promotion programs that incorporate healthy eating and physical activity.
- Incorporate evidence-based, best practice strategies into the criteria when feasible.
- Create and disseminate an easy-to-use toolkit to local businesses and key stakeholders.
- Promote participation in the program through multiple means.
- Award businesses meeting the criteria.
- Publicize the list of previous award winners to encourage further applications.

5.6.4 A *By 2008, 10 communities will be recognized for their achievements in promoting and supporting a healthy lifestyle.*

B *By 2010, 50 communities will be recognized for their achievements in promoting and supportinga healthy lifestyle.*

- Research what is currently available as resources for community health promotion programs that incorporate healthy eating and physical activity.
- Incorporate evidence-based, best practice strategies into the criteria when feasible.
- Create and disseminate an easy-to-use toolkit to communities and key stakeholders.
- Promote participation in the program through multiple programs, community-based organizations, and service clubs.
- Award communities meeting the criteria.
- Publicize the list of previous award winners to encourage further applications

strategy 7

Promote a physically active lifestyle by increasing the opportunities for physical activity for children and adolescents.

5.7.1 *By 2007, 25% of children will walk or bike to school.*

- Promote walking and biking to school by better coordinating promotional events and designating safe routes to school. Tie short-term promotional events such as Walk to School Day or Movin' Schools to longer term programs such as Safe Routes to School or Walking School Buses.
- Retain current neighborhood schools and plan new schools so accessible routes or trails are incorporated into the design.
- Implement Safe Routes to School Programs.

5.7.2 *By 2007, the number of after school programs/community programs that incorporate physical activity programming will increase to 70%.*

- Expand opportunities for youth to participate in developmentally appropriate, organized competitive and non-competitive activities through after school and youth programs.
- Encourage family involvement in physical activity as part of daily routine.
- Provide schools with samples of activities that can be used to encourage additional physical activity that involves the family, including education for parents.
- Coordinate with school and community facilities and organizations to increase physical activity opportunities for children.
- Provide recommendations on physical activity for preschool or day care settings.
- Promote policies that encourage after school use of school recreational facilities.
- Pilot and expand the Fit WIC Learning Center concept.

5.7.3 *By 2005, the Nutrition and Physical Activity program will pilot a nutrition and physical activity intervention for parents of elementary school-aged children and their families outside of the school environment.*

- Design and implement a community based intervention that meets the CDC intervention criteria.
- Utilize social marketing approaches to plan and implement the intervention across multiple levels of the social ecological model.
- Engage the local community coalition to provide leadership for the intervention.
- Develop and disseminate a "toolkit" for other communities to use in designing similar interventions in their community.

5.7.4 *By 2007, 67% of schools will provide opportunities for students to be physically active in school related settings outside of physical education class.*

- Expand opportunities for competitive and non-competitive sports and physical activity options, such as team and individual sport participation, club sports and intramural.
- Promote "extra credit" opportunities for activity that is tracked outside of PE class and applied to PE as an adjunct to the regular class periods.
- Promote policies that require daily recess in elementary schools.
- Provide schools with best practice models that can be used to encourage additional physical activity outside of PE class.
- Provide teacher training and ongoing continuing education on physical education that encourages maximum activity for all participants during PE class (i.e. promote non-competitive PA, example: "Physical Best").
- Provide schools with recommended curriculum that promote maximum participation during class and emphasize lifelong physical activities.
- Provide schools with recommended templates for physical fitness testing and encourage increased use of testing as a means to track the number of students meeting basic fitness standards.

5.7.5 *By 2008, decrease the percentage of children and adolescents watching over 2 hours of television.*

- Determine a baseline from the Youth Risk Behavior Survey (YRBS) and Pediatric Nutrition Surveillance System (PedNSS) as data is available.
- Increase awareness and access to physical activity programs.
- Promote TV Turnoff week by providing healthy alternatives to TV.
- Increase awareness of the affect media can plan on intake and energy expenditure, both positive and negative.

strategy 8

Promote a physically active lifestyle for adults.

5.8.1 *By 2010, decrease the percentage of adults who are sedentary to 12%.*

- Expand opportunities for adults to participate in appropriate activities, including adults with disabilities and older adults.
- Encourage family involvement in physical activity as part of daily routine.
- Provide samples of activities that can be used to encourage additional physical activity.
- Promote policies that encourage before/after school use of school recreational facilities for community members.
- Encourage short trips made by biking and walking for recreation and activities of daily living.

5.8.2 A *By 2006, increase the number of adults who participate in the Governor's Challenge and Lighten Up Wisconsin by 10%.*

B *By 2008, increase the number of adults who participate in the Governor's Challenge and Lighten Up Wisconsin by 10% from 2006.*

- Promote the Governor's Challenge and Lighten Up Wisconsin through promotional events and media. Tie short-term promotional events such as Lighten Up Wisconsin and the Governor's Challenge to longer term programs such as worksite wellness programs for more impact.
- Increase awareness of the health benefits of physical activity for adults of all ages and abilities.
- Include Governor's Challenge and Lighten Up Wisconsin participation rates in the evaluation criteria for a community recognition awards program.

goal 6

Expand and implement a Nutrition and Physical Activity surveillance and evaluation system to facilitate data-driven decisions.

Vision 2015

Regular reports on obesity and physical activity and nutrition behaviors will be published to highlight the issues that need to be addressed and determine focuses for interventions. Gaps in key data will have been identified and a mechanism to secure this key data will be explored and developed.

strategy 1

Establish a comprehensive and continuous surveillance system to monitor body mass index (BMI), nutrition and physical activity behaviors, weight-related chronic diseases, and related environmental factors at state and local levels in Wisconsin.

6.1.1 *By 2010, revise CDC Behavioral Risk Factor Survey (BRFSS) modules and questions to include health/risk behaviors, environmental factors, policies, and mortality rates of chronic diseases.*

- Utilize the CDC Behavioral Risk Factor Survey (BRFSS) modules and questions for health/risk behaviors, environmental factors, policies, and mortality rates of chronic diseases.
- Provide input, when possible, to federal considerations to modify BRFSS questions.
- Explore other means and opportunities to collect this information.

6.1.2 *By 2005 and annually thereafter, publish a report on nutrition, physical activity, and weight in Wisconsin.*

- Identify nutrition and physical activity variables to be collected for preschool-aged children, school-aged children and adults to monitor the Nutrition and Physical Activity Plan progress.
- Develop a protocol for uniform data collection (measurement guidelines, data collection form, reporting system).
- Compile and publish regular reports on nutrition, physical activity, and weight in Wisconsin including environment and policy data from communities.
- Evaluate use of surveillance system information to maximize relevance/effectiveness of the data and system.

6.1.3 *By 2005, identify/hire an epidemiologist to provide the expertise and leadership necessary to establish and maintain a nutrition and physical activity surveillance system.*

- Develop a position description for an epidemiologist (e.g., assemble available databases; assess needs of program/partners; establish routine monitoring and evaluation goals; produce reports).
- Work with the state process for hiring or contracting for an epidemiologist.

6.1.4 *By 2007, expand the submission of appropriate data from Wisconsin public health data collection systems (WIC, SPHERE) to CDC Nutrition Surveillance Systems (PedNSS/PNSS).*

- Determine feasibility and logistics of expanded data submission to PedNSS/PNSS.
- Develop a model MOU for the collection and sharing of information between data collections systems and surveillance systems.
- Identify and engage possible sources of data such as clinics, health systems, Medicaid, schools, school nurses, and special studies.

6.1.5 *By 2007, 3 data-sharing partnerships will be established with institutions that have relevant data.*

- Explore opportunities for data-sharing partnerships.
- Develop a procedure to prioritize data needs.
- Establish a centralized data warehouse for nutrition and physical activity measures captured in electronic case records.
- Identify non-traditional sources of data such as manufacturers' data, food inventory at retail/wholesale outlets, sales and market data, etc.

strategy 2

Improve and increase the collection and dissemination of nutrition and physical activity related data for preschool and school-aged children, adolescents and adults.

6.2.1 *By 2005, develop guidance for collection of height/weight of pre-school and school-aged children.*

- Write an issue brief on the pros and cons of school-based nutrition surveillance.
- Review existing guidance documents and Wisconsin practices.
- Form a committee to develop guidance on weighing and measuring school-aged children that includes: decision items on if a school should weigh and measure, how to, how to interpret the results, what to do with the results, surveillance methods and intervention recommendations.
- Pilot test guidance for collection of weight/height (BMI) measurements for school-aged children.
- Disseminate guidance document and provide training on its use.
- Evaluate the feasibility and benefits of a state policy requiring reporting of rates of overweight/obesity by schools or other sources.

6.2.2 *By 2008, 50 middle schools will participate in the middle school Youth Risk Behavior Survey (YRBS).*

- Include YRBS participation in the criteria for the Wisconsin Governor's School Health Award Program.
- Publicize website access to complete YRBS and make access as easy as possible.
- Publish and disseminate results

6.2.3 *By 2006, 20% of schools will complete a nutrition and physical activity assessment.*

- Develop and disseminate a nutrition and physical activity assessment tool such as the Wisconsin DPI Healthy School Index or CDC School Health Index.
- Analyze and make available data from a representative sample of schools and students.
- Include a school assessment in the criteria for the Wisconsin Governor's School Health Award Program.
- Encourage use of assessment tools in meeting the federal requirements for school wellness councils.

6.2.4 A *By 2007, develop a system for reporting on nutrition, physical activity and weight-related surveillance data on children and adolescents collected at the community level.*

B *By 2007, develop a system for reporting on nutrition, physical activity and weight-related surveillance data on adults collected at the community level.*

- Determine data to be collected: height, weight, waist circumference, body fat percentage, nutrition status/behaviors (e.g., breastfeeding, feeding behaviors of parents/caregivers, fruit/vegetable intake), physical activity status/behaviors (e.g., TV viewing, proxies such as places for active play).
- Determine collection source.
- Determine how data are to be collected and reported: paper vs. web systems such as SPHERE (Maternal and Child Health data collection system).
- Determine how data are going to be stored and accessed.
- Research what other states do to collect this type of data.
- Develop a timeline and a system for data collection.
- Determine cost and cost effectiveness of various options.
- Determine who is interested in collecting data or who may already collecting data.
- Continue to develop a system for collecting nutrition, physical activity and weight-related surveillance data on a representative sample of infants and children.

goal 7

Eliminate disparities among those who are disproportionately affected by obesity and chronic diseases.

Vision 2015 **:**
There are existing disparities between demographic and ethnic groups on some physical activity and nutrition measures. By 2015, those discrepancies will be clearly identified. Information on disparities and tools to address disparities will be disseminated to partners. Coordination of interventions with business, health care, school and community groups will be key in addressing these problems.

strategy 1

Promote diversity competence among all sectors.

7.1.1 A *By 2006, the Nutrition and Physical Activity Program will develop a plan for addressing disparities and diversity competence related to nutrition and physical activity.*

B *By 2008, the Nutrition and Physical Activity Program disparity plan will be implemented.*

- Identify those population sub-groups which are at disproportionate risk of overweight and obesity.
- Promote health professions to members of at risk communities.
- Utilize a tool with cultural competency measures for assessment of health care provider services, including diversity of workforce, to identify cultural competency issues and priorities and nutrition and physical activity needs.
- Promote policies to assure cultural and linguistic competence in care related to obesity prevention and management.
- Identify and promote resources for self-assessment for diversity/cultural competency.
- Collaborate with partners on development/selection of culturally competent materials and training (i.e. motivational counseling, Bridges Out of Poverty, etc).
- Identify culturally appropriate nutrition and physical activity messages.

Strategy 2:

Target interventions to populations at high risk of obesity and related chronic diseases.

7.2.1 *By 2010, increase the number of community interventions/initiatives that focus on an identified population at high risk of obesity.*

- Promote awareness of existing best practice programs and resources among communities at risk and among partners and organizations that serve the community.
- Collaborate with organizations and programs that serve at-risk populations to incorporate culturally appropriate nutrition and physical activity messages.
- Involve members of the population in planning, designing and implementing interventions.
- Monitor the burden of obesity among high risk population sub-groups.
- Increase awareness of the role food insecurity and hunger play in obesity.

moving from planning to implementation

implementing the plan

Resources

The Wisconsin Nutrition and Physical Activity State Plan is intended to be a call to action to address the growing epidemic of overweight and obesity. This plan provides a framework that should be utilized in a variety of settings across Wisconsin to begin the difficult process of reversing the trend and impact of overweight and obesity. It will take a coordinated effort by a variety of partners to reach the goals and objectives outlined in this plan.

As budgets and resources are stretched to the limit, many have asked "how will we be able to implement this plan?" Funding for the implementation of this plan will need to come from a variety of traditional and non-traditional sources. The CDC cooperative agreement to prevent obesity and related chronic diseases will help support the infrastructure of a Nutrition and Physical Activity Program within the State Health Department and the implementation of some objectives.

The Nutrition and Physical Activity Program and the Wisconsin Partnership for Activity and Nutrition will:

- work with internal and external partners to promote the use of the plan,
- stimulate new partnerships,
- expand and strengthen current partnerships,
- maximize opportunities and resources,
- increase policymakers' awareness of actions that can impact obesity.

Since this is a plan for Wisconsin, state and community organizations will be asked to take responsibility for implementation of the plan. This can occur in a variety of ways. Organizations may take lead on certain objectives and incorporate these activities as part of their mission. At times organizations may be faced with some difficult decisions to shift resources or funding from long-standing initiatives to new ones based on the needs of the target population. Individuals or organizations may take an active role on state and local coalitions or committees who are working on the implementation of specific objectives. We all, as individuals, can be role models and champions of efforts to change where we live, work and play.

In the initial stages of the plan implementation there are several objectives that focus on consistent messages, toolkits, return on investment (ROI) briefs, surveys and standards. Many of these items will be developed at a state level and be made available to local communities, organizations and coalitions. Training and technical assistance will be provided at a state level to support the use of these tools. Much of the implementation of the plan will take place at the community level reinforcing the public health vision - *Healthy People in Healthy Wisconsin Communities.*

As the plan is implemented, evaluation of efforts will be vital to monitoring impact but also to allow the leveraging of resources necessary for continued implementation.

Selecting Interventions

The criteria used to select goals, strategies and objectives for inclusion in this plan was described previously. As interventions are developed to implement the strategies and objectives outlined, certain considerations should be made. For this discussion, an intervention is "a prescribed series of activities grounded within a Social-Ecological Model with the main purpose of changing and/or influencing existing obesity, nutrition and physical activity-related behaviors and/or practices" (Centers for Disease Control and Prevention, 2004). At a minimum, an intervention would include all of the following components:

- Grounded in theory and applied within the social-ecological model
- Defined purpose and clearly stated goals and objectives
- Expected outcomes
- Defined intervention methodology (where, when and how)
- Strategy for implementation and collaboration with partners
- Identified target population(s)
- Defined evaluation methodology

Interventions should be selected as part of a comprehensive plan in the community or organization where each leads to medium and long term outcomes. Using a social marketing process to design and implement any intervention will increase the likelihood that it has the desired impact.

Social Marketing

Despite widespread knowledge about healthy lifestyles, many people continue behaviors that may negatively impact their health. There are also many good programs designed to promote healthy lifestyles that go underutilized. Social marketing is a popular and effective behavior change strategy that offers an innovative approach to tackling health behaviors - an approach that starts and ends with understanding the consumer[15].

It is recommended that the social marketing process be utilized during the design and implementation of interventions focused on overweight and obesity prevention. The six basic phases include:

Phase 1: What is the problem?
Effective social marketing interventions begin with a clear understanding of the health issue. The problem description phase enhances the understanding of the problem by identifying preliminary behavioral objectives, audience segments and lists of potential behavioral determinants. The results of this phase guide the development of objectives.

Phase 2: Market Research
Market research, also known as formative research, is used to fill the gaps in what is known about the target audience and gather other information identified as important during the problem description phase. Because social marketing demands a thorough understanding of consumers and the people who influence their decisions, the formative research phase requires a far more in-depth analysis of consumers' beliefs, values and behavior that typically accomplished in most program needs assessments.

Phase 3: Market Strategy
Developing the market strategy is the translation of the formative research into concrete strategies for achieving behavior change in the target audience. The purpose of this phase is to prepare a strategic marketing plan, a step-by-step implementation plan, and evaluation and monitoring plan. When developing the market strategy keep in mind the 4Ps of marketing: product, price, place, promotion. Also think about policy or those laws and regulations that influence the desired behavior.

Phase 4: Interventions
It is in this phase that the program materials and activities are developed. Once developed, program strategies, campaign messages, materials and other products are pretested with the target audience and revised.

Phase 5: Monitor/Evaluation Planning
Through monitoring and evaluation information is collected to assess program outcomes, document the process by which outcomes were obtained, and monitor program progress. Evaluation and monitoring should be considered throughout the process and fed back into program re-planning efforts. Within social marketing every aspect of the evaluation should be clearly linked to every other aspect of the social marketing process: linkages between market research; strategy (4Ps), partnerships, and politics; evaluation; and strategy refinement should be evident.

Phase 6: Implementation
In the implementation phase the intervention is launched and the monitoring and evaluation is begun. Activities may need to be modified based on feedback. It is also important to find ways to institutionalize activities and find other ways to sustain the program.

By using the social marketing process, interventions will be targeted based on the unique needs and circumstances of the audience.

social marketing is	social marketing is not
• A social or behavior change strategy	• Just advertising
• Most effective when it activates people	• A clever slogan or messaging strategy
• Targeted to those who have a reason to care and who are ready for change	• Reaching everyone through a media blitz
• Strategic and requires efficient use of resources	• An image campaign
• Integrated, and works on the "installment plan"	• Done in a vacuum
	• A quick process

what's happening in wisconsin

To address the obesity epidemic, several state and local initiatives have been undertaken in the recent past. The following activities represent some of the activities that are a result of this plan to date or are activities that support the implementation of this plan. Again, this is only a sampling of the many things that are being done in Wisconsin

Community-Based Intervention in Marathon County
The Healthy Eating, Active Living (H.E.A.L.) Coalition of Marathon County and the Nutrition and Physical Activity Program are partnering to design and implement a community-based intervention to increase fruit and vegetable consumption and increase physical activity among parents and elementary school aged children.

Got Dirt? A Toolkit for Implementation of Childcare, School and Community Gardens - The toolkit is designed as an easy to use, step-by-step guide for implementing childcare, school and community gardens with the purpose of increasing fruit and vegetable access and consumption. The toolkit is available at http://dhfs.wisconsin.gov/health/physicalactivity/gotdirt.htm.

Governor's School Award Program - The Governor' s School Award Program is a collaborative effort between the Governor' s Office, Governor' s Council on Physical Fitness and Health, the Department of Public Instruction and the Department of Health and Family Services. It is designed to recognize schools that have taken steps to create an environment that supports healthy eating and being physically active. The application materials can be found at www.schoolhealthaward.wi.gov.

Joint Statement on the Importance of Nutrition and Physical Activity - This statement was a collaborative effort between the Division of Public Health Program Integration Workgroup and the Joint Advocacy Workgroup. The statement was developed to highlight the need for collaboration among all sectors to address the epidemic of obesity in Wisconsin. The statement is posted at http://dhfs.wisconsin.gov/health/physicalactivity/index.htm

Active Community Environment Trainings - A series of trainings were held in 2004 to bring a diverse set of partners together to build partnerships and learn strategies for building a community environment that promotes and supports active living. Similar workshops and trainings have continued. For more information go to: www.wisconsinwalks.org

Improving Community Health through Policy: You Can Do It!
This is a series of trainings for community-based workgroups or coalitions sponsored by the Marshfield Clinic Center for Community Outreach. The trainings give basic information on how to affect environmental and policy at a local level.

FIT WIC Learning Centers - FIT WIC is a program to prevent overweight by encouraging the development of health eating and activity habits among WIC Program participants and staff. The Wisconsin model' s goals include the community environment, clinic environment, staff competencies/confidence and parental involvement. The focus is families of 2-4 year olds.

Lighten Up Wisconsin - Lighten Up Wisconsin is a five-month competition that encourages team members to make small, realistic and permanent changes in their eating and physical activity habits what will last a lifetime. The Wisconsin Sports Development Corporation facilitates this initiative. For more information, http://www.sportsinwisconsin.com/

Loving Support through Peer Counseling - The USDA funding Loving Support through Peer Counseling is being implemented lin select WIC Program sites in Wisconsin. One component of the program is focused on bi-lingual Hmong and Latino breast-feeding peer counselors.

Stepping Up To a Healthy Lifestyle - The Wisconsin Nutrition Education Network has developed the Stepping Up to a Healthy Lifestyle campaign. The main objective of this campaign is to promote physical activity and healthy eating habits, consistent with the Dietary Guidelines for Americans and MyPyramid, to Wisconsin Food Share (Food Stamp) recipients and applicants. Previous campaigns include Jump'n' Jive: Come Alive with Fruit and Walk, Dance, Play…Be Active Everyday. For more information, www.nutrisci.wisc.edu/nutrinet

School Health Council grant program - This program is a collaboration between the American Heart Association, Department of Public Instruction, Nutrition and Physical Activity Program and the Parent Teacher Association. The focus of the program was to provide $1,000 mini-grants and training to 43 schools to develop or expand their school wellness council to meet the requirements of the 2004 Child Nutrition Reauthorization Act.

Movin' Schools - Movin' Schools is an innovative program designed to increase the level of physical activity among Wisconsin' s school children and their families and school staff. It also rewards participating schools with funds to improve physical education programs. For 2005-2006 the program has been expanded to include a nutrition component. Information on Movin' and Munchin' Schools can be found at www.dpi.state.wi.us/sspw/pdf/movnmunchn.pdf

Healthy Lifestyles Initiative - The Wisconsin Restaurant Association has developed a Healthy Lifestyles Initiative that includes a position statement on obesity, a website with a searchable dining guide and materials for restaurants. To visit the website go to www.wirestaurant.org/news/obesity/index.cfm

Lean You - Quad/Graphics has implemented a company-wide wellness incentive program called "Lean You" to promote and reward healthy lifestyles. The program is highlighted in the July 2005 issue of the Wisconsin Medical Journal, www.wisconsin-medicalsociety.org

Fit*4*Life Project - UW Pediatric Fitness Initiative has partnered with the school districts of Stoughton and Madison to measure childhood cardiovascular fitness levels. A goal is to expand this project to establish an infrastructure and database to measure school-based fitness to compare fitness program guidelines and curriculum with local and state targets.

Healthy Children Strong Families (HCSF) - HCSF directly addresses the health disparity of pediatric obesity among American Indian (AI) children in Wisconsin. Great Lakes Inter-Tribal Council, Inc. and Dr. Alexandra Adams at UW-Medical School have partnered to develop and evaluate an innovative family-based obesity prevention program for AI children in 3 tribal communities: Bad River, Lac du Flambeau, and Menominee.

University of Wisconsin Population Health Institute Issue Briefs
The Population Health Institute has developed a series of issue briefs that include, Improving Student Nutrition through School Vending Machine Policies and Should Schools Monitor Rates of Overweight and Obesity among Students in Wisconsin? The Institute also published a variety of other reports and papers on the health of Wisconsin residents. For more information go to: www.pophealth.wisc.edu/uwphi/index.htm

State and Local Coalitions - Wisconsin has over 40 state and local coalitions that are focused on overweight and obesity prevention, improved nutrition and increased physical activity. They are key to the implementation of this plan. To see a listing of the current coalitions go to the Nutrition and Physical Activity website, http://dhfs.wisconsin.gov/health/physicalactivity/index.htm

call to action

The Wisconsin Nutrition and Physical Activity State Plan is a call to action for all organizations, communities and individuals in Wisconsin to work together to reduce obesity, improve nutrition and increase physical activity. It will take the active involvement of many partners to apply diverse and innovative solutions to change systems, community and individual behaviors. Public and private partners are needed to change policies and environments that support healthy eating and physical activity, and families and individuals will need to take charge of their own behavior. By working together, the people of Wisconsin have a great opportunity to create communities that support healthy lifestyles and impact the obesity epidemic.

what you can do

1. Review the plan goals, strategies and objectives. Identify specific items where you or your organization can be involved.
2. Commit to becoming a partner with the Wisconsin Partnership for Activity and Nutrition.
3. Complete the Partner Involvement form. Anyone with existing activities, new ideas, or an interest in being involved may complete the form.
4. Collaborate with others who share common goals to maximize opportunities and resources

how to become involved

You or your organization can become a partner by completing and returning the Partner Involvement form in this document or on the Nutrition and Physical Activity Program website, **http://dhfs.wisconsin.gov/health/physicalactivity/index.htm**. As partners complete the form, the Nutrition and Physical Activity Program will track the partners and the activities that are being implemented. This information will be used to assist with coordination of efforts and to have a comprehensive inventory of activities. It may also be used to identify any gaps in implementation and future priority areas and/or populations.

wisconsin nutrition & physical activity state plan

implementing the plan — partner involvement

Please copy and fax your endorsement of the Wisconsin Nutrition and Physical Activity State Plan to the Nutrition and Physical Activity Program at 608.266.3125, or complete it online at http://dhfs.wisconsin.gov/health/physicalactivity/index.htm. Your endorsement may be publicly acknowledged on the Nutrition and Physical Activity Program website and in plan-related materials.

1. I am endorsing the Wisconsin Nutrition and Physical Activity State Plan as an:

☐ Individual ☐ Organization

2. My full name, or the name of my organization or group: _____

3. The type of organization I represent (choose up to three):

☐ Coalition
☐ Community Group
☐ Food Service/Restaurant
☐ Health Plan/Insurer
☐ Professional Association
☐ Recreational/Sports Setting
☐ Resident
☐ School
☐ Worksite/Employer
☐ Communication/Media
☐ Faith Community
☐ Health Care Delivery
☐ Government Agency Non-Profit
☐ Public Health Department
☐ Research Institution
☐ Retail/Business Setting
☐ University
☐ Other _____

4. I will provide a link from my organization' s website to the Wisconsin Nutrition and Physical Activity Program.

☐ Yes ☐ No ☐ Decision Pending

5. I/we can work on the following activities in the Wisconsin Nutrition and Physical Activity State Plan to help accomplish its goals:

_____

_____

_____

_____

_____

6. I would like to become a member of the Wisconsin Partnership for Activity and Nutrition

☐ Yes ☐ No

Contact Information

Contact Name_____ Credentials _____

Organization (if applicable) _____ Position/Title _____

Mailing Address _____

Telephone No. _____ Fax No. _____

E-mail _____ Website _____

Department of Health and Family Services | Division of Public Health
State of Wisconsin | Bureau of Community Health Promotion | 608.267.3694

measuring progress: surveillance & evaluation

Introduction and Overview

The evaluation of the State Plan will use a multi-component, mixed-methods approach to measure progress toward meeting goals and objectives. Three types of evaluation activities will be included: monitoring and tracking functions, process evaluation activities, and outcome evaluation activities. Wisconsin's surveillance systems will continue to provide monitoring and outcome data at the state-level and for specific populations. Planned expansion of these systems will allow collection of data not currently captured but essential to measure progress, as well as access to youth populations for whom data is currently not available. Other data collection strategies will include the use of appropriate existing tools and the development of new assessment tools. Multiple partners, all key stakeholders in the development and implementation of the State Plan, will participate in the evaluation activities.

Planning for evaluation was an integral part of the State Plan development process. The Logic Model (Appendix B) guided the work of the six committees, as well as that of the Nutrition and Physical Activity Program staff, ensuring the inclusion of coordinated short, intermediate, and long-term objectives capable of exerting a positive impact on Wisconsin's overall plan measures. Use of the Logic Model also helped to identify gaps in data, data sources, and/or data collection partners essential to evaluation of the State Plan. Goal 6 includes strategies to address these gaps.

In addition to identification and coordination of objectives, the Wisconsin Partnership for Activity and Nutrition committees used the Logic Model to select realistic and measurable indicators of change. Selection of process indicators designed to measure level of effort, activity, infrastructure and capacity change was relatively straightforward. Selection of outcome measures was more challenging since the following critical points needed to be considered: (1) nutrition and physical activity related behaviors are difficult and slow to change; (2) rates of overweight, obesity, and related chronic diseases are on the rise and slowing the rate of increase is a positive change; (3) outcome data are most frequently collected via population-based surveillance systems which require an extended timeframe to show positive change from the statewide coordination of efforts implemented at the community level; and (4) conservative targets for an increase in positive outcomes or a decrease in negative outcomes represent significant change since they are reversing expected trends. A positive change of 4–6% in nutrition and physical activity related outcomes reflects significant progress.

The evaluation component of the State Plan represents current best thinking on how to approach measurement of progress, but it is expected to evolve over time. Constraints on evaluation activities such as availability of data sources, feasibility of creating and/or accessing data sources, adequate data collection partners, and funding will be addressed as resources permit. As a state, Wisconsin is actively engaged in public-private dialogues about health data-sharing partnerships and the creation of broadly accessible data warehouses. Many key government, university, and health systems stakeholders are involved in these dialogues, setting the expectation that evaluation capacity will increase over the next decade.

Monitoring and Tracking

The documentation, monitoring and tracking of implementation of the State Plan provides the essential foundation for evaluation activities. This process creates the archival record of what was done, when it was done, and by whom. While the Nutrition and Physical Activity Program will serve as the coordinating body for this activity, each State Plan partner will be responsible for tracking the activities that they implement. The Wisconsin Partnership for Activity and Nutrition will create an implementation or work plan during 2005, organized by partners committed to serving as lead agencies/facilitators.Because many State Plan partners have monitoring and tracking systems in place, an important first step will be to design an information gathering process that minimizes burden on partners while capturing all relevant data.

Process Evaluation

The goal of the process evaluation is to measure changes in the level of effort or activity in the following key domains targeted in the State Plan:

- Training, Education and Resources
- Coalition Infrastructure and Capacity Measures
- Nutrition and Physical Activity Program Infrastructure and Capacity Measures
- Environmental Audits
- Practice Changes: School, Healthcare, Insurance/Medicaid, Worksite, Community
- Policy Changes
- Legislative Changes
- Award/Recognition Program
- Challenge Programs
- Surveillance and Other Data Collection Systems

The process evaluation will seek to answer four questions: (1) how closely did the implementation of the State Plan match the objectives; (2) what types of deviation from the Plan occurred; (3) what led to the deviations; and (4) what impact did the success or deviations from the process objectives have on the outcomes measures?

All State Plan partners will collect process data relevant to their particular areas of responsibility through records and observations, document and policy content analyses, and secondary data sets. The implementation plan will include steps to capture the relevant process measures for each partner/lead agency.

The Department of Health and Family Services will contract with an evaluation services vendor to develop a Coalition development survey that will capture changes in infrastructure and capacity building measures. The Nutrition and Physical Activity Program staff have developed a web-based system for collecting Coalition and community level program data. The goal will be to add the Coalition development survey to this web-based system, with data committed directly to a central database.

In addition to staff collecting process data, the evaluation of changes in the Nutrition and Physical Activity Program infrastructure and capacity building measures is addressed in the section below: Evaluation of Key Stakeholder Interview Data.

Outcome Evaluation

The goal of the outcome evaluation is to measure changes that have occurred, accomplishments that have been achieved and needs that have been met among the populations targeted. The following outcome measures will be monitored:

- Statewide Nutrition and Physical Activity Infrastructure
- Provider Skills and Practices
- Community Environments to Support Healthy Eating and a Physically Active Lifestyle
- State and Local Policies Enacted or Enforced
- Funding to Support the Implementation of the State Plan
- Breastfeeding
- Fruit and Vegetable Consumption
- Sweetened Beverage Consumption
- TV Viewing
- Physical Activity Levels for Children, Adolescents &Adults
- Interventions Targeted to High Risk Populations

Some of the variables normally considered process measures are included in this section because of their critical importance to the State Plan achieving success at the macro-measure level. These variables represent the end result of multiple, successful process objectives over time. For example, reaching the objective of "By 2010, the Nutrition and Physical Activity Program will facilitate the implementation of evidenced-based interventions at the coalition level" represents the cumulative impact of a uniform communication system, uniform standards, best practices, guidelines and toolkits, regional trainings, technical assistance and cross-coalition mentoring, an increase in key partnerships, and reaching a critical mass of viable community level coalitions.

State Plan Logic Models

Logic models were used throughout the planning process for the State Plan. Logic models are graphic depictions of the relationship between a program's activities and its intended outcomes. In this case it shows the State Plan's activities, and how the activities link together and to the intended outcomes. Logic models also are the starting point for evaluation as it shows the logic behind the plan or the set of activities that were chosen because, if implemented, they should lead to the intended outcomes. Appendix B includes three models that depict the planning model used, a global view of the State Plan and an elaborated view of the short, intermediate and long term outcomes.

Measurement Tools

The process and outcome evaluation will utilize existing data collection tools, enhance these tools by increasing their capacity to capture additional variables, access new data sets through data-sharing partnerships, and identify or develop new strategies to collect data not currently captured. The existing data surveillance systems that will be used to monitor the progress and impact of the State Plan are described below.

Behavioral Risk Factor Surveillance System (BRFSS)

The Behavioral Risk Factor Surveillance System (BRFSS) is a random-sample telephone survey conducted annually by health departments in all 50 states, the District of Columbia, Puerto Rico, the Virgin Islands, and Guam in collaboration with the Centers for Disease Control and Prevention (CDC). The BRFSS includes questions on the health-related behaviors of adults, such as tobacco and alcohol use, physical activity, diet, weight control and use of preventive and other health care services. Data is collected through telephone interviews with randomly selected adults aged 18 years or older. BRFSS data may be used to identify emerging health problems; establish and track health objectives; develop, implement, and evaluate a broad array of disease prevention activities; and support health-related legislative efforts. For more information on the Wisconsin BRFSS go to: http://dhfs.wisconsin.gov/stats/BRFS.htm

Youth Risk Behavior Surveillance Survey (YRBSS)

The Wisconsin Youth Risk Behavior Surveillance Survey (YRBSS) is conducted as part of a national effort by the Centers for Disease Control and Prevention to monitor health-risk behaviors of the nation's high school students. The behaviors monitored by the Wisconsin YRBS include traffic safety; weapons and violence; suicide; tobacco use; alcohol and other drug use; sexual behavior; and diet, nutrition and exercise. The Department of Public Instruction (DPI) has administered the YRBS every two years beginning with 1993. The YRBS is administered to students in Wisconsin's public high schools. For more information on the Wisconsin YRBSS go to: www.dpi.state.wi.us/dlsea/sspw/yrbsindx.html

figure 10: listing of existing surveillance systems that will be used to monitor State Plan outcomes

source	relevant information	data collection years	population
BRFSS	Height and Weight, Exercise	Every year	Representative statewide sample of adults 18 years and older
	Physical Activity, Fruits and Vegetables, Weight Control	Every odd year	
YRBSS	Physical activity, Physical education, Fruits and vegetables, TV viewing, Height and weight, Soda, Dairy	Every odd year	Representative statewide sample of high school students
PedNSS	Weight-for-age, Height-for-age, Anemia, Breastfeeding, TV viewing	Every year	Infant and child participants of the Wisconsin Women, Infants and Children (WIC) Program
PNSS	Demographics, Pre-pregnancy Weight status, Weight gain during pregnancy, Breastfeeding trends, Pregnancy outcome	Every year	Prenatal and post-partum participants of the Wisconsin Women, Infants and Children (WIC) Program
NIS	Breastfeeding initiation, Duration at 6 and 12 months, Exclusive breastfeeding at 3 and 6 months	Ongoing since 2003	National sample of households with children aged 19-35 months

Pediatric and Pregnancy Nutrition Surveillance Systems

The Pediatric Nutrition Surveillance System (PedNSS) and the Pregnancy Surveillance System (PNSS) are program-based surveillance systems that monitor the nutritional status of low-income infants, children, and women in federally funded maternal and child health programs. Data are collected at the clinic level then aggregated at the state level and submitted to the Centers for Disease Control and Prevention (CDC) for analysis. These surveillance systems provide data that describe prevalence and trends of nutrition, health, and behavioral indicators for mothers and children. Currently, in Wisconsin, only data from the Women, Infant and Child (WIC) Program is submitted to for analysis. For more information on PedNSS or PNSS go to: www.cdc.gov/pednss

National Immunization Survey

The CDC National Immunization Program, in partnership with CDC's National Center for Health Statistics, conducts the National Immunization Survey (NIS) within all 50 states, District of Columbia, and selected geographic areas within the states. This nationwide survey provides the nation's public health community with current national, state, and selected urban-area estimates of vaccination coverage rates for U.S. children aged 19 to 35 months. Since January 2003, breast-feeding questions have been asked of all survey respondents to assess the population's breastfeeding practices. As a result, the 2003 NIS results not only provide overall population estimates for the initiation, duration, and exclusivity of breastfeeding, but also provide geographically-specific breastfeeding rates. For more information on the NIS survey go to: www.cdc.gov/breastfeeding/data/NIS_data/index.htm

Additional Tools

The following lists some of the additional tools that will be utilized to monitor the progress and impact of the State Plan.

- The Nutrition and Physical Activity Program web-based inventory system that captures Coalition and community level data, including evidence-based program and best practices information.
- The Wisconsin Special Supplemental Nutrition Program for Women, Infants and Children (WIC) — a data collection system that captures information on health indicators, breastfeeding, and specific nutrition and physical activity indicators such as height and weight, breastfeeding, feeding practices, TV viewing, and physical activity from program participants and their children ages 0-4.
- The Comprehensive School Health Education Profile (SHEP) — captures data on curricula, professional preparation and development of teachers, guidelines and policies, and parent/community involvement; the Wisconsin Department of Public Instruction also administers in-depth surveys specific to nutrition education and physical education.
- The Secure Public Health Electronic Record Environment (SPHERE) — the Wisconsin Maternal and Child Health data collection system.

Addressing the Gaps

The objectives included in Goal 6 identify gaps in key data and mechanisms to collect, analyze and report on this data. Efforts to address these gaps will include consideration of:

- additional modules and/or questions for the BRFSS;
- expansion of Wisconsin public health data collection systems (WIC, SPHERE) to surveillance systems (PedNSS/PNSS);
- establishment of data-sharing partnerships;
- establishment of a centralized data warehouse for appropriate measures captured in electronic case records;
- increasing the number of middle schools participating in the YRBSS;
- collection and dissemination of data on children under the age of 5 not captured in the PedNSS or Wisconsin WIC systems, and elementary and middle school children;
- collection and dissemination of data on children, adolescents and adults collected at the community level; and
- development of a uniform data collection protocol.

The responsibility for activities related to outcome data will be shared across the appropriate state and community level partners. At the state and local level, these partners include a variety of public and private agencies and organizations who have been involved in the development of the State Plan and those who will implement the plan. The partners represent multiple sectors including: public health, universities, employers, schools, healthcare, environment, professional organizations, advocacy organizations and residents. The University of Wisconsin Public Health Institute has already sponsored a major colloquium on health data-sharing partnerships, and Governor James Doyle has endorsed the collection and sharing of data captured via electronic case records. The implementation plan for the State Plan will capitalize on these efforts, identify additional partners, and outline specific areas of responsibility.

Evaluation of Key Stakeholder Interview Data

The Pacific Institute for Research and Evaluation (PIRE), a contracted vendor for Wisconsin's CDC cooperative agreement to prevent obesity, conducted 30 key stakeholder interviews in the summer of 2004 addressing key domains of State and Coalition-level nutrition and physical activity infrastructure and capacity. Both quantitative and qualitative data were collected on variables such as leadership, communication, training and technical assistance, coordination, collaboration, data-driven decision-making, support for and use of evidence-based interventions and practices, and cultural competence. PIRE analyzed the data and prepared a summary report on September 1, 2004. This report provides a baseline picture of key stakeholders' perceptions of many of the outcomes targeted in the State Plan.

DHFS plans to contract with an evaluation services vendor to conduct follow-up key stakeholder interviews in 2008. The vendor will analyze the data, compare results with the 2004 baseline data, and prepare a summary report. This type of rich interview data adds to the understanding of process evaluation results and helps to explain outcome evaluation results.

Reporting of Evaluation Results

Evaluation results will be reported on a schedule appropriate to the audience. Annual reports will be provided to the Centers for Disease Control and Prevention as part of the progress reporting for the obesity prevention cooperative agreement. Regular reports will be provided to state, Coalition, community audiences and the public on the state plan progress. Reports will be made available on the website and/or as a hard copy, as appropriate.

Nutrition and Physical Activity State Plan Objectives Benchmarks

The following chart provides a summary of the State Plan objectives and the respective baseline information that will be used for monitoring and evaluation. Also included are those organizations or programs identified as key partners for the implementation of the objective. The key partner list includes the program or organization that will be responsible for facilitating the implementation of the objective. These partners were identified by the Wisconsin Partnership for Activity and Nutrition through a group process. This group process was completed to identify if there was sufficient support or "critical mass" for the objective area to assure that it was realistic and achievable. It is understood that this is not an inclusive list and that more partners will be needed for full implementation. The target outcome provides a brief description of "how things will be different" if this objective is completed. An implementation workplan for each objective will be developed to clearly specify the lead, resources needed, evaluation method, specific activities and timeline. This will be an internal working document for the Partnership group and key partners.

nutrition & physical activity
state plan benchmarks

objective #	objective	evaluation measure	baseline	partners	target outcome
1.1.1	By 2010, the Nutrition and Physical Activity Program will facilitate the implementation of evidenced-based interventions at the coalition level.	Coalition survey and coalition development tool	None	DHFS Coalitions WIPAN	Increase in the number of interventions being implemented
1.1.2	By 2006, the Nutrition and Physical Activity Program will coordinate annual regional trainings on coalition infrastructure and capacity building.	Training agenda(s)	None	DHFS Coalitions UW Extension Marshfield Healthy Lifestyles Coalition	Coalitions will have Increased capacity to implement interventions
1.1.3	By 2005, the Nutrition and Physical Activity Program indicators for evidenced-based interventions and best practices have been defined and communicated to nutrition and physical activity related coalitions.	List of indicators and evidenced based interventions	None	DHFS Coalitions AFHK	Evidence based interventions defined and easily accessible
1.1.4	By 2005, the Nutrition and Physical Activity Program will complete an inventory of existing nutrition and physical activity initiatives and interventions.	Coalition survey	None	DHFS Coalitions UW Extension	Inventory of activities to measure progress and for sharing
1.1.5	a) By 2005, the Nutrition and Physical Activity Program will administer a uniform communication system for all coalitions and partners via a website and electronic listserve. b) By 2005, 90% of the nutrition and physical activity coalitions will be subscribed to the Wisconsin Partnership for Activity and Nutrition listserve.	Website and listserve addresses Subscriber list	None	DHFS UW Extension Coalitions	Central method for communication among Program and coalitions Communication system being used
1.2.1	a) By 2006, 75% of nutrition and physical activity coalition chairs or their designee(s) will have attended a training session on coalition building. b) By 2008, 90% of nutrition and physical activity coalition chairs or their designee(s) will have attended an annual training session on coalition building.	Training attendance logs	None	DHFS Coalitions UW Extension Marshfield Healthy Lifestyles Coalition	Target audience reached with trainings
1.2.2	By 2007, increase the number of active community nutrition and physical activity related coalitions to 55.	Coalition List	43 in 2004	DHFS Local Communities Local Health Departments	Increased state and community capacity to support interventions
1.2.3	By 2007, 5 coalitions meeting best practice criteria will establish a mentoring program.	List of coalition mentoring programs	None	WIPAN Coalitions	New or expanding coalitions will have a network of support
1.3.1	By 2008, all local coalitions will have representation from at least 50% of the key partnerships identified by the coalition to participate in community health improvement processes.	Coalition development tool	None	Coalitions	Key partners are participating in the coalitions

objective #	objective	evaluation measure	baseline	partners	target outcome
1.3.2	By 2007, establish new state level partnerships to assure the appropriate representation needed to implement the Nutrition and Physical Activity Plan.	Partner group membership list	50 different organizations represented on WIPAN	WIPAN DHFS	New partnerships formed to assure appropriate representation
2.1.1	By 2005, the Wisconsin Partnership for Activity and Nutrition will identify key nutrition and physical activity messages to prevent and manage obesity.	List of key messages	None	WIPAN DHFS UW Extension DPI AFHK	Key nutrition and physical activity messages available to be used by partners for consistency
2.2.1	By 2006, the Wisconsin Partnership for Activity and Nutrition will release "briefs" to highlight how important supportive nutrition and physical activity environments are to a healthy lifestyle.	Copy of "briefs" developed	None	WIPAN UW Population Health Institute	Increased awareness of policy makers, stakeholders and consumers
2.2.2	By 2006, the Wisconsin Partnership for Activity and Nutrition will develop and disseminate a toolkit showing the return on investment associated with promotion and support of nutrition and physical activity strategies for worksites.	Toolkit complete, number of businesses receiving the toolkit	None	DHFS WIPAN WELCOA Alliance Quad Med Coalitions WRA, WSDC, WMC, Diabetes Program	Toolkit available to worksites to improve the work environment to support healthy eating and active lifestyles
2.2.3	By 2007, the Wisconsin Partnership for Activity and Nutrition will develop and disseminate a toolkit with guidelines and tools for healthcare providers to implement a systems approach to healthcare for obesity prevention, assessment and management.	Toolkit complete, number of healthcare providers receiving the toolkit	None	WAHP, SMS, AAP, AAFP, WDA, CVH Program, Children's Hospital of WI	Toolkit available to healthcare providers to improve prevention and management of overweight and obesity
2.3.1	By 2010, Wisconsin medical and allied health professional training programs will include information on obesity prevention and management.	Review of curriculum/course offerings	To be determined	Nutrition faculty and medical schools Dietetic Opportunities in Public Health Nutrition	Medical and allied health professional training programs will include information on obesity prevention and control
2.3.2	By 2008, 200 Registered Dietitians will have completed the American Dietetic Association's weight management training certificate program for children and adolescents and/or adults.	List of RDs who have completed one or both programs	74 adult certificates obtained as of 12/04 21 child certificates obtained as of 2/05	Wisconsin Dietetic Association	200 Registered Dietitians will have weight management training
2.3.3	By 2006, increase the proportion of healthcare providers that routinely screen for overweight and obesity among children, adolescents and adults.	Provider Survey	To be determined	Professional Associations WAHP, SMS WIPAN	Identify if healthcare providers screen for obesity as a basis for further activities
2.3.4	By 2010, university pre-service and continuing education programs for teachers will include information on how healthy food choices and physical activity affect student performance and health.	Review of curriculum/ course offerings	To be determined	School of Education DPI	University pre-service programs for teachers will include information on how healthy food choices and physical activity affect student performance and health
2.3.5	By 2008, the Nutrition and Physical Activity Program and its partners will provide trainings needed to implement effective services and interventions.	Training agendas	None	WIPAN Coalitions DPI, DHFS UW Extension	Increased capacity to implement effective interventions

objective #	objective	evaluation measure	baseline	partners	target outcome
3.1.1	a) By 2006, 10 communities in Wisconsin will conduct an environmental audit to identify support and barriers to physical activity within their community. b) By 2008, 30 communities in Wisconsin will conduct an environmental audit to identify support and barriers to physical activity within their community. c) By 2010, 50 communities in Wisconsin will conduct an environmental audit to identify support and barriers to physical activity within their community.	Coalition Survey	To be determined	Local Health Departments Coalitions Bicycle Federation of Wisconsin, Wisconsin Walks, Inc.	Supports and barriers to physical activity have been identified in communities that conduct an audit
3.1.2	a) By 2006, 10 communities in Wisconsin will conduct an environmental audit to determine the number and location of outlets for fruits and vegetables. b) By 2008, 30 communities in Wisconsin will conduct an environmental audit to determine the number and location of outlets for fruits and vegetables. c) By 2010, 50 communities in Wisconsin will conduct an environmental audit to determine the number and location of outlets for fresh produce.	Coalition Survey	To be determined	Coalitions Local Health Departments, 5 A Day Coalition, Grocers Association, Food Security Groups	Number and location of outlets for fruits and vegetables determined in communities that have conducted an audit
3.2.1	By 2006, 200 community leaders who participate in "Creating Healthy Community Environments" trainings will demonstrate an increased knowledge of the link between land use, transportation and health.	Pre and Post evaluations	248 registered for 2004 sessions	WIPAN Wisconsin Walks, Inc. Bike Federation 1000 Friends of Wisconsin	Increased knowledge of creating active environments by community leaders
3.2.2	By 2008, 25 coalitions or communities will publish and disseminate a resource guide of community resources that support an active lifestyle and healthy eating habits.	Resource guides available; coalition survey	Baseline to be determined	Parks and Recreation Departments, Bike Fed, WI Walks, DHFS UW Extension Coalitions	Resource guides available to community members
3.3.1	a) By 2006, increase by 5% the number of farmers' markets, farm stands and Community Supported Agriculture farms throughout the state. b) By 2008, increase by 10% the number of farmers' markets, farm stands and Community Supported Agriculture farms throughout the state.	Listing of Farmers' Markets in Wisconsin from USDA Marketing Services Branch	58 Farmers Markets in Wisconsin in 2005	WIPAN DATCAP DHFS UW Extension WI Nutrition Education Network, FFA, FFA Alumni	Increase outlets for locally grown fruits and vegetables; 61 Farmers' Markets by 2006; 64 by 2008
3.3.2	By 2007, 10 communities will make one improvement to their community's access to fruits and vegetables based on their community's environmental audit.	Coalition Inventory Survey	New Initiative; Baseline to be determined	Coalitions Local Health Departments, 5 A Day Coalition, Grocers Association, Food Security Groups	Community environment changes based on audits
3.3.3	By 2007, 10 communities will make one improvement to their community's walkability/ bikeability based on their community's environmental audit.	Coalition Inventory Survey	Baseline to be determined	Coalitions Local Health Department Planning/ Zoning Departments	Community environment changes based on audits

objective #	objective	evaluation measure	baseline	partners	target outcome
3.3.4	By 2006, 5 communities will establish a Safe Routes to School Program.	List of communities with a Safe Routes to School Program	Baseline to be determined	DOT (BOTS) Gov. Bicycle Council, Wisconsin Walks, Inc. Bike Fed. DPI, PTOs Schools	Environment and policy changes to support walking and biking for children
3.3.5	By 2008, increase the number of people that utilize physical activity facilities that are available and accessible to the general public.	To be determined	Baseline to be determined	Fitness groups – state level WAPHERD UW Extension Public Health Local Coalitions	Increase the number of people who utilize physical activity facilities
3.3.6	a) By 2006, 50% of the Metropolitan Planning Organizations (MPOs) will adopt physical activity friendly transportation policies. b) By 2009, 100% of the Metropolitan Planning Organizations (MPOs) will adopt physical activity friendly transportation policies.	Survey of MPO plans	13 MPO's exist in Wisconsin	MPOs; DOT; DHFS; 1000 Friends of Wisconsin; Regional Planning Organizations	Increase in the number of MPO's that include physical activity as part of their policies/plans
3.3.7	By 2008, communities will utilize the nutrition criteria established by the Wisconsin Partnership for Activity and Nutrition when selecting healthy food and beverage choices available in public spaces.	Coalition Inventory Survey	None	LPHD, Coalitions, County Boards, City Councils Chambers of Commerce	Communities will utilize consistent criteria when making food and beverages available to the public
3.3.8	By 2006 increase the number of restaurants that offer and identify healthy eating options by 25%.	The number of restaurants that participate in the WRA Healthy Lifestyles Initiative www.wirestaurant.org/	887 (6/2005)	Wisconsin Restaurant Association	Increase access of healthy choices for food eaten or prepared away from home
4.1.1	By 2006, the Wisconsin Partnership for Activity and Nutrition will develop an infrastructure to support public policy and advocacy efforts.	Advocacy plan developed	None	WIPAN, Marshfield, Local Coalitions	Infrastructure for advocacy and public policy efforts established
4.1.2	By 2006, the Wisconsin Partnership for Activity and Nutrition and key partners will develop and disseminate a policy toolkit to local coalitions and key stakeholders.	Toolkit developed and disseminated	None	WIPAN, Marshfield, Local Coalitions	Tools available for use by partners
4.2.1	a) By 2007, 100% of school districts will adopt a K-8 policy of 3 physical education classes per week of which 2 are taught by a certified Physical Education teacher. b) By 2010, 100% of school districts will adopt policies requiring a minimum of 150 minutes of physical education per week for K-5 students and 225 minutes per week for 6-12 students through school-based or homework activities.	DPI Physical Education Profiles School Health Education Profiles (SHEP)	89%; 2003 poll of elementary PE programs 41% of 6-12th graders get > 120 minutes; 2004	DPI, Schools, PE Teachers, Governor's Council on Fitness and Health	Physical education will be taught by qualified staff and children will be physically active

objective #	objective	evaluation measure	baseline	partners	target outcome
4.2.2	By 2006, all schools participating in the USDA School Lunch and/or School Breakfast Program will adopt a school wellness policy that includes goals for nutrition education, physical activity and guidelines for all foods available on the school campus.	To be determined	None	WIPAN, DPI, AFHK, WASB, Schools, Coalitions, CESAs	Schools will have policies in place for an environment that supports physical activity and healthy eating
4.2.3	By 2010, increase the number of health insurance providers that provide coverage for prevention, assessment and management of overweight and obesity for children, adolescents and adults.	Inventory of health insurance plans	Minimal coverage currently available	DHCF WI Assn of Health Plans WI Primary Health Care Assn	Increase in available insurance coverage for obesity prevention and management
4.2.4	a) By 2007, the major healthcare plans and Wisconsin Medicaid will partner with the Wisconsin Partnership for Activity and Nutrition to identify and disseminate expert panel guidelines for prevention, assessment and management of overweight and obesity. b) By 2008, the major healthcare plans and Wisconsin Medicaid will partner with the Wisconsin Partnership for Activity and Nutrition to identify recommendations to improve prevention, assessment and management of overweight and obesity for children, adolescents and adults. c) By 2009, the major healthcare plans and Wisconsin Medicaid will implement the expert panel guidelines for the prevention, assessment and management of overweight and obesity for children, adolescents and adults.	Inventory of health insurance plans	Guidelines currently not readily available or consistently utilized	WIPAN DHCF WI Assn of Health Plans WI Primary Health Care Assn	Consistent assessment and management of overweight and obesity among Wisconsin healthcare plans
4.2.5	By 2007, increase the number of businesses who have implemented worksite health promotion policies.	To be determined	None	WI PAN, Wisconsin Manufacturers in Commerce, WELCOA, The Alliance	Worksite environments that support healthy eating and physical activity
4.2.6	By 2010, increase the number of state and local policies that affect overweight/obesity prevention and management that have been adopted or expanded.	Coalition Inventory	In the last year: Legislative 3 Policy 16 2004-2005	WIPAN, Coalitions', Schools Worksites Communities Healthcare Business & Industry	Increase in policies and laws that support healthy behaviors
4.3.1	By 2010, increase public and private funding for facilities enhancements to promote and support an active lifestyle.	To be determined	To be determined	DOT, DNR, 1000 Friends of Wisconsin, WI Walks, Bicycle Federation of WI	Increased resources for facility enhancements
4.3.2	By 2010, secure adequate funding for community-based nutrition and physical activity professionals in every community to implement and support initiatives and interventions that support healthy eating and an active lifestyle.	To be determined	To be determined	WI PAN, Local Coalitions, Local Health Departments	Infrastructure of nutrition and physical activity professionals to support state and local interventions

objective #	objective	evaluation measure	baseline	partners	target outcome
4.3.3	By 2006, increase the public and private funding to support the implementation of the Nutrition and Physical Activity state plan.	DPH Contracts Wisconsin Partnership Fund Awardees WIPAN in-kind forms	Federal sources, $1,116,475 Wisconsin Partnership Fund $2,684,219	WI PAN, Advocacy groups, Local Health Departments, Healthiest Wisconsin Partnership Fund	State plan is being implemented
5.1.1	By 2006, 75% of infants will be breastfed in the early post-partum period.	PedNSS National Immunization Survey	53.9% 2004 PedNSS 69.9% 2003 NIS	DHFS, WBC, WALC, WAPC, WI PAN, WIC	Infants will receive protection against over-weight and other chronic diseases
5.1.2	By 2007, 50% of infants will be breastfed for at least 6 months.	PedNSS National Immunization Survey	25% 2004 PedNSS 35.1% 2003 NIS	DHFS, WBC, WALC, WAPC, WI PAN, WIC	Infants will receive protection against over-weight and other chronic diseases
5.1.3	By 2008, 20% of infants will be exclusively breastfed for at least 6 months.	National Immunization Survey	16.0% 2003 NIS	DHFS, WBC, WALC, WAPC, WI PAN, WIC	Infants will receive protection against over-weight and other chronic diseases
5.1.4	By 2010, 25% of infants will be breastfed at least 12 months.	PedNSS National Immunization Survey	16.1% 2004 PedNSS 14.0% 2003 NIS	DHFS, WBC, WALC, WAPC, WI PAN, WIC	Infants will receive protection against over-weight and other chronic diseases
5.1.5	By 2008, 10 hospitals will have adapted the "Ten Steps to Successful Breastfeeding".	List of hospital meeting Baby Friendly criteria	2	DHFS WBC, WAPC WI Hospital Assn., WALC	Maternity care practices support breastfeeding
5.2.1	By 2010, increase the number of children who meet the recommendations for fruit and vegetable consumption by 6%.	To be determined	To be determined	DHFS, DPI, AFHK, 5 A Day Coalition, Coalitions, Schools	More children are meeting the recommenda-tions for fruits and vegetables
5.2.2	By 2010, 34% of adolescents will meet the recommendations for fruit and vegetable consumption.	YRBS	28% eat 5 servings of fruits and vegetables/ day 2003	DHFS, DPI, AFHK, 5 A Day Coalition, Coalitions, Schools	More adolescents are meeting the recommenda-tions for fruits and vegetables
5.2.3	By 2010, 28% of adults will meet the recommendations for fruit and vegetable consumption.	BRFSS	22% eat 5 servings of fruits and vegetables/ day 2003	DHFS, 5 A Day Coalition, Coalitions	More adults are meeting the rec-ommendations for fruits and vegetables
5.2.4	By 2007, 75% of the WIC Farmers' Market Nutrition Program participants surveyed will report that they consumed more fruits and vegetables due to program participation.	WIC FMNP participant survey	66% in 2004	WIC, DATCAP, DPI, 5 A Day Coalition; Market Managers, Vendors	The FMNP is having an impact on the amount of fruits and vegetables consumed

objective #	objective	evaluation measure	baseline	partners	target outcome
5.2.5	By 2007, increase the number of childcare, school and community gardens.	To be determined	To be determined	DHFS, UW Extension Horticulture, Master Gardeners, DATCAP, DPI, 4H, Schools, FEEDS Project	Increase access to gardens for fresh produce and educational experiences
5.2.6	By 2005, the Wisconsin 5 A Day Coalition will resume functioning as a fully operational coalition.	Annual Report of Coalition Activities	Coalition resumed in September 2004	DHFS, Growers, Grocers, Coalitions	5 A Day action plan is being implemented
5.3.1	By 2008, decrease the daily consumption of sweetened beverages among adolescents to 50%.	YRBS	60% had 1 or more soda/day 2004	DPI, AFHK, Schools, WIPAN	Adolescents are consuming less high energy dense beverages
5.3.2	By 2010, increase the percentage of children and adolescents whose diet meets the Dietary Guidelines for Americans.	To be determined	To be determined	WIPAN, Coalitions, AFHK, DPI, Schools	More children are getting the nutrients needed for growth and health
5.3.3	a) By 2006, 45% of all public and private school food authorities will offer a school breakfast program. b) By 2008, 55% of all public and private school food authorities will offer a school breakfast program. c) By 2012, 80% of all public and private school food authorities will offer a school breakfast program.	DPI	38% (356 of 926 SFA's) 2003-04 School Year	DPI, Gov. Office, Schools, Coalitions, PTA/PTO	More children will have access to a healthy breakfast
5.3.4	By 2008, increase the percentage of adults whose diet meets the Dietary Guidelines for Americans.	To be determined	To be determined	WIPAN, Coalitions	More adults will consume a diet that promotes health and reduces chronic disease
5.4.1	By 2010, increase the number of Wisconsin employers who offer benefit packages and work-place health promotion programs that incorporate healthy eating and physical activity.	Survey of employers	To be determined	WIPAN, WELCOA, The Alliance, Employers	Adults will have access to and support for healthy eating and being physically active
5.4.2	By 2006, the Nutrition and Physical Activity Program will pilot a worksite intervention to prevent and manage obesity.	Intervention Evaluation Plan	To be determined	DHFS	Worksite inter-vention will be developed, pilot-ed and evaluated
5.5.1	By 2008, at least one health care system will implement and evaluate an intervention to gather evidence that prevention (coverage and self-care) services are cost effective for both the health care system and employer and impact obesity and related chronic disease.	Survey of healthcare systems/ plans	New initiative	WIPAN, WAHP, Quad Med	A health care system will implement and evaluate an intervention to "make the case" for prevention
5.5.2	By 2007, the major health insurance plans and Wisconsin Medicaid will identify and begin to implement recommendations to improve coverage for obesity prevention and management services.	To be determined	To be determined	WIPAN, DHCF, WAHP, CVH Program, SMS, AAP, AAFP, LPHD, School Nurses	Coverage available for prevention and management of obesity for chil-dren and adults
5.6.1	By 2006, the Wisconsin Partnership for Activity and Nutrition and partners will develop a recognition program for schools, worksites and communities.	Recognition Program(s) launched	New initiative	WIPAN, Coalitions, Schools, Worksites, Communities Gov. Council, DPI, DOT, DHFS, DNR	Mechanism to recognize schools, worksites and communities that support healthy eating and being physically active

objective #	objective	evaluation measure	baseline	partners	target outcome
5.6.2	a) By 2007, 10 schools will be recognized for their achievements in promoting and supporting a healthy lifestyle. b) By 2009, 50 schools will be recognized for their achievements in promoting and supporting a healthy lifestyle.	Number of schools meeting criteria for recognition	New initiative	DHFS, DPI, Gov. Council Schools, Coalitions, WEA Trust	Schools meeting criteria will be recognized; best practices will be identified
5.6.3	a) By 2007, 10 worksites will be recognized for their achievements in promoting and supporting a healthy lifestyle. b) By 2009, 50 worksites will be recognized for their achievements in promoting and supporting a healthy lifestyle.	Number of worksites meeting criteria for recognition	New initiative	DHFS, Gov. Council, WELCOA, The Alliance WIPAN, Diabetes Program	Worksites meeting criteria will be recognized; best practices will be identified
5.6.4	a) By 2008, 10 communities will be recognized for their achievements in promoting and supporting a healthy lifestyle. b) By 2010, 50 communities will be recognized for their achievements in promoting and supporting a healthy lifestyle.	Number of communities meeting criteria for recognition	New initiative	DHFS, Gov. Council, WIPAN, LPHD, Coalitions, UW Extension	Communities meeting criteria will be recognized; best practices will be identified
5.7.1	By 2007, 25% of children will walk or bike to school.	Number of children walking/ biking	To be determined	DPI, Schools, PTO/PTA DOT	More children would be active as part of their daily routine
5.7.2	By 2007, the number of after school programs/ community programs that incorporate physical activity programming will increase to 70%.	Community Learning Center Report SHEP	2004 52% in Middle and High School	DPI, UW Extension, WI Nutrition Education Network, After school program, YMCA, Parks and Rec., Boys and Girls Club	Children are provided with opportunities to be physically active through after school programs
5.7.3	By 2005, the Nutrition and Physical Activity program will pilot a nutrition and physical activity intervention for school-aged children and their families outside of the school environment.	Intervention plan and evaluation results	New initiative	DHFS	Community intervention will be developed, piloted and evaluated
5.7.4	By 2007, 67% of schools will provide opportunities for students to be physically active in school related settings outside of physical education class.	SHEP	61% in 2004	DPI, Schools, After school program, YMCA, Parks and Rec., Boys and Girls Club	A variety of opportunities for physical activity/ education will be available to students
5.7.5	By 2008, decrease the percentage of children and adolescents watching over 2 hours of television per day.	To be determined	To be determined	DPI, WIPAN, AFHK	Less time is spent in sedentary activity; less exposure to media
5.8.1	By 2010, decrease the percentage of adults who are sedentary to 12%.	BRFSS	19% in 2003	Coalitions, WIPAN, WSDC	Less time is spent in sedentary activity
5.8.2	a) By 2006, increase the number of adults who participate in the Governor's Challenge and Lighten Up Wisconsin. b) By 2008, increase the number of adults who participate in the Governor's Challenge and Lighten Up Wisconsin.	Wisconsin Sports Development participation numbers	6,500 participated in Lighten Up Wisconsin in 2005	Governors Office, WSDC, WIPAN	Increase the number of adults who participate in the Governor's Challenge
6.1.1	By 2010, revise CDC Behavioral Risk Factor Survey (BRFSS) modules and questions to include health/risk behaviors, environmental factors, policies, and mortality rates of chronic diseases.	BRFSS Wisconsin survey set	BRFSS currently used to track BMI, physical activity and fruit and vegetable consumption	DHFS	BRFSS used to track factors in the State Plan

objective #	objective	evaluation measure	baseline	partners	target outcome
6.1.2	By 2005 and annually thereafter, publish a report on nutrition, physical activity, and weight in Wisconsin.	Report available	In process	DHFS	Ongoing monitoring of the burden of obesity
6.1.3	By 2005, identify/hire an epidemiologist to provide the expertise and leadership necessary to establish and maintain a nutrition and physical activity surveillance system.	Filled position or contract	No staff currently assigned	DHFS	Staff to complete objectives related to monitoring the burden of obesity
6.1.4	By 2007, expand the submission of appropriate data from Wisconsin public health data collection systems (WIC, SPHERE) to CDC Nutrition Surveillance Systems (PedNSS/PNSS).	PedNSS and PNSS data reports	Only WIC data currently submitted to CDC	DHFS, LPHD, Schools	Nutrition surveillance data for larger population groups and ages
6.1.5	By 2007, 3 data-sharing partnerships will be established with institutions that have relevant data.	To be determined	No data sharing partnerships formalized	DHFS, UW Population Health	Data available for surveillance
6.2.1	By 2005, develop guidance for collection of height/weight of pre-school and school-aged children.	Guidance developed and available	No Wisconsin specific guidelines available	WIPAN, AFHK, DPI, AAP, AAFP, SMS, School Nurses, Schools	Guidance for growth screening available to all schools and communities
6.2.2	By 2008, 50 middle schools will participate in the middle school Youth Risk Behavior Survey (YRBS).	Number of schools that participate in survey – DPI	One school has used the middle school YRBS	DPI, DHFS	Data available for the middle school aged children which is currently very limited
6.2.3	By 2006, 20% of schools will complete a nutrition and physical activity assessment.	DPI survey of schools	To be determined	DPI, AFHK DHFS	Schools will have a baseline for improvement of the school environment
6.2.4	a) By 2007, develop a system for reporting on nutrition, physical activity and weight-related surveillance data on children and adolescents collected at the community level. b) By 2007, develop a system for reporting on nutrition, physical activity and weight-related surveillance data on adults collected at the community level.	System developed	New Initiative	WI Association of School Nurses DHFS WI Pop Health	Statewide surveillance system for collection of nutrition, physical activity and weight-related data
7.1.1	a) By 2006, the Nutrition and Physical Activity Program will develop a plan for addressing disparities and diversity competence related to nutrition and physical activity. b) By 2008, the Nutrition and Physical Activity Program disparity plan will be implemented.	Disparity plan developed and implemented	None	DHFS	Plan for addressing disparities
7.2.1	By 2010, increase the number of community interventions/initiatives that focus on an identified population at high risk of obesity.	Coalition Inventory	None	DHFS, Coalitions, LPHD	Targeted interventions are being implemented

appendices, glossary, references, acknowledgements

Goal 1	Strengthen and sustain the statewide nutrition and physical activity infrastructure to prevent and manage obesity and obesity related chronic diseases
2015 Vision	State and local partners will be engaged and organized to work in a coordinated manner. Regular communications through websites, listserves, e-mails and mailings will result in sharing of successful programs that create the greatest local impact.
Strategies	1.1 The Nutrition and Physical Activity Program will provide leadership and support for the implementation of strategies to prevent and manage obesity. 1.2 Expand or strengthen the network of community coalitions to implement strategies to prevent and manage obesity through improved nutrition and increased physical activity. 1.3 Engage key stakeholders at both the local and state level in efforts to prevent and manage obesity.

Goal 2	Develop materials and provide technical support to facilitate consistent messages and initiatives
2015 Vision	There will be a library of standardized materials that can be shared by all partners to focus efforts on specific objectives using proven interventions to change outcomes. These materials will provide guidance for interventions being done in a community, a health care setting, a business or a school and will also be available at the family and individual level. A master list of policies to impact these settings will also be developed and will include recommendations for areas with health disparities.
Strategies	2.1 Key nutrition and physical activity messages will be consistently promoted through a variety of channels such as healthcare providers, insurers, schools, worksites, media, etc. 2.2 Develop and disseminate materials to support the implementation of identified nutrition and physical activity strategies. 2.3 Provide training and education needed to support the implementation of identified nutrition and physical activity strategies.

Goal 3	Create environments that support and promote healthy eating, daily physical activity and a healthy weight.
2015 Vision	Trainings will be held statewide to educate key players that influence the environment. These trainings will result in a better awareness of the role the environment plays in improving nutrition and physical activity opportunities and assessments of local environments to identify areas of change. Resource materials will provide a blueprint on how to affect environmental factors through policies and local practices that encourage people to practice healthy eating habits and an active lifestyle. (Environmental)
Strategies	3.1 Assess the existing state and local nutrition and physical activity environments. 3.2 Increase awareness and access to opportunities that promote healthy eating, physical activity and a healthy weight. 3.3 Make environmental changes to promote and support healthy eating, daily physical activity and a healthy weight.

Goal 4	Develop and implement a comprehensive policy agenda to affect positive change.
2015 Vision	Participants will be provided information on policies that have been proven to make a difference. Incentive and award programs will be established to encourage policies that support healthy eating and an active lifestyle. A coordinated policy initiative will be developed based on a consensus of partners and identified lead organizations to promote it.
Strategies	4.1 Establish and mobilize an infrastructure to conduct advocacy activities. 4.2 Implement policy strategies at a state and local level that impact healthy food choices and a physically active lifestyle. 4.3 Advocate for funding to support the implementation of strategies to prevent and manage obesity through improved nutrition and increased physical activity and improved access and coverage of obesity prevention and management services.

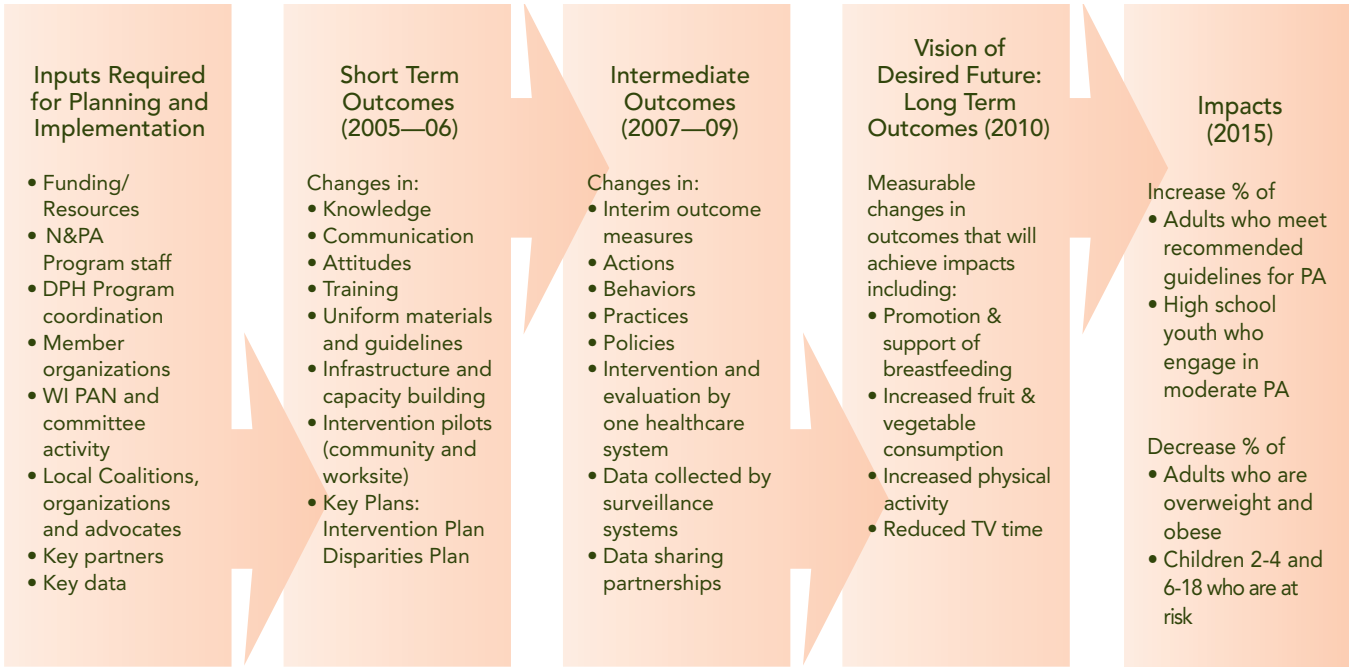
Goal 5	Increase the coordination of interventions and the number of evidenced-based or best practice interventions that are implemented.
2015 Vision	There are many physical activity and nutrition interventions occurring in Wisconsin. Some of those interventions are not well coordinated with other activities and some have a lesser impact because of the type of intervention. By 2015, there will be a state website that will provide access to information that better shares what is going on locally and statewide. This will result in more effective programs because of better coordination and linking of local, regional and state initiatives and resources. Local partners will be able to focus their resources for programs using information and templates provided by the State that are based on proven evidenced-based or best practice interventions. These materials will provide specific information about how to create change at several levels: individual, interpersonal, organizational, community, and policy.
Strategies	5.1 Promote and support exclusive and sustained breastfeeding as the norm in infant feeding. 5.2 Promote consumption of fruits and vegetables among children, adolescents and adults. 5.3 Promote consumption of healthy food choices among children, adolescents and adults. 5.4 Businesses will promote positive health messages and provide access to employer-sponsored health promotion programming. 5.5 Increase access to and coverage of prevention and management services related to nutrition and physical activity. 5.6 Implement an award/recognition program for schools, worksites and communities. 5.7 Promote a physically active lifestyle by increasing the opportunities for physical activity for children and adolescents. 5.8 Promote a physically active lifestyle for adults.

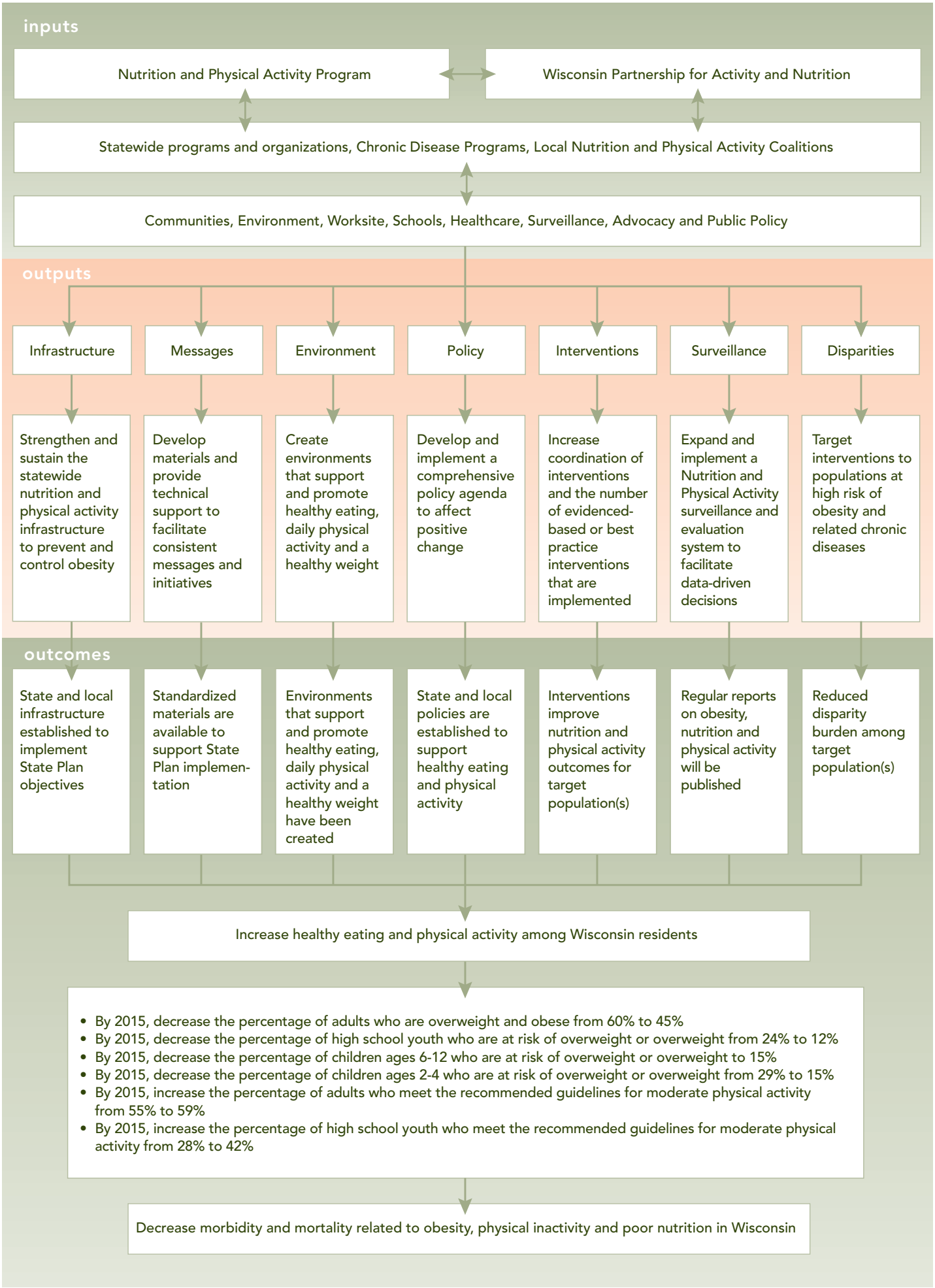
Goal 6	Expand and implement a Nutrition and Physical Activity surveillance and evaluation system to facilitate data-driven decisions.
2015 Vision	Regular reports on obesity and physical activity and nutrition behaviors will be published to highlight the issues that need to be addressed and determine focuses for interventions. Gaps in key data will have been identified and a mechanism to secure this key data will be explored and developed.
Strategies	6.1 Establish a comprehensive and continuous surveillance system to monitor body mass index (BMI), nutrition and physical activity behaviors, weight-related chronic diseases, and related environmental factors at state and local levels in Wisconsin. 6.2 Improve and increase the collection and dissemination of nutrition and physical activity related data for preschool and school-aged children, adolescents and adults.

Goal 7	Eliminate disparities among those who are disproportionately affected by obesity and chronic diseases.
2015 Vision	There are existing disparities between demographic and ethnic groups on some physical activity and nutrition measures. By 2015, those discrepancies will be clearly identified and information will be disseminated to partners regarding the disparities and tools for creating programs to address them. Coordination of interventions with business, health care, school and community groups will be key in addressing these problems.
Strategies	7.1 Promote diversity competence among all sectors. 7.2 Target interventions to populations at high risk of obesity and related chronic diseases.

Wisconsin Nutrition and Physical Activity State Plan

strategic planning logic model




inputs
Nutrition and Physical Activity Program
Wisconsin Partnership for Activity and Nutrition
Statewide programs and organizations, Chronic Disease Programs, Local Nutrition and Physical Activity Coalitions
Communities, Environment, Worksite, Schools, Healthcare, Surveillance, Advocacy and Public Policy
outputs
Infrastructure
Messages
Environment
Policy
Interventions
Surveillance
Disparities
Strengthen and sustain the statewide nutrition and physical activity infrastructure to prevent and control obesity
Develop materials and provide technical support to facilitate consistent messages and initiatives
Create environments that support and promote healthy eating, daily physical activity and a healthy weight
Develop and implement a comprehensive policy agenda to affect positive change
Increase coordination of interventions and the number of evidenced-based or best practice interventions that are implemented
Expand and implement a Nutrition and Physical Activity surveillance and evaluation system to facilitate data-driven decisions
Target interventions to populations at high risk of obesity and related chronic diseases
outcomes
State and local infrastructure established to implement State Plan objectives
Standardized materials are available to support State Plan implementation
Environments that support and promote healthy eating, daily physical activity and a healthy weight have been created
State and local policies are established to support healthy eating and physical activity
Interventions improve nutrition and physical activity outcomes for target population(s)
Regular reports on obesity, nutrition and physical activity will be published
Reduced disparity burden among target population(s)
Increase healthy eating and physical activity among Wisconsin residents
By 2015, decrease the percentage of adults who are overweight and obese from 60% to 45%
By 2015, decrease the percentage of high school youth who are at risk of overweight or overweight from 24% to 12%
By 2015, decrease the percentage of children ages 6-12 who are at risk of overweight or overweight to 15%
By 2015, decrease the percentage of children ages 2-4 who are at risk of overweight or overweight from 29% to 15%
By 2015, increase the percentage of adults who meet the recommended guidelines for moderate physical activity from 55% to 59%
By 2015, increase the percentage of high school youth who meet the recommended guidelines for moderate physical activity from 28% to 42%
Decrease morbidity and mortality related to obesity, physical inactivity and poor nutrition in Wisconsin

short, intermediate & long term outcomes

The table to the right is a summary of the short, intermediate and long term outcomes of the Nutrition and Physical Activity State Plan. This is an elaboration of the logic model on the previous page to illustrate the outcomes expected as a result of the interaction of the seven goal areas of the State Plan. As the State Plan is implemented these outcomes will be monitored and tracked as the foundation for evaluation activities.

short term outcomes 2005 – 2006

- Indicators for evidenced based interventions
- Annual regional infrastructure & capacity building trainings
- Inventory of interventions
- Uniform communication system with 90% participation rate
- 75% of coalitions trained
- Toolkits developed & disseminated
- Increase in screening by healthcare providers
- 10 community environmental audits
- 200 leader increase knowledge about creating active community environments
- 5% increase in farmers' markets
- 25% increase in healthy options in restaurant
- Safe Routes to School in 5 communities
- Activity friendly policies adopted by 50% of MPOs
- Advocacy plan for policy change
- Wellness policies in all schools
- Increase in funding for State Plan implementation
- 75% of infants breastfed in the early postpartum period
- 5 A Day Coalition operational
- 45% of schools offer school breakfast
- Community and worksite interventions piloted
- Recognition program developed
- Increased adult participation in Governor's Challenge
- Annual reports on obesity burden
- Epidemiologist hired
- Guidelines for collection of height and weight for school-aged children developed
- N & PA assessment completed by 20% of schools
- Plan for addressing disparities and diversity competence developed

intermediate outcomes 2007 – 2009

- 90% of Coalitions trained
- 55 active Coalitions
- All Coalitions include 50% of key partnerships
- New state-level partnerships developed
- Healthcare Toolkit developed and disseminated
- 200 RDs are ADA certified for weight management
- Program implementation and services training
- 30 community environmental audits
- 10% increase in farmers' markets
- 10 community improvements in walkability and/or bikeability
- Criteria for healthy choices in public spaces utilized
- 100% of school districts adopt K-8 policy of 3 PE classes/week; 2 taught by certified PE teachers
- Partnership with insurers and Medicaid to develop, disseminate and implement guidelines
- Increase in worksite health promotion policies
- 50% of infants breastfed for 6 months
- 20% of infants exclusively breastfed for 6 months
- 10 hospitals adopt "Ten Steps to Successful Breastfeeding"
- Increased fruit and vegetable consumption by 75% of WIC farmers' market participants
- Increased number of daycare, school and community gardens
- Decrease sweetened beverage consumption by teens to 50%
- 55% of schools offer school breakfast
- Increased % of adults whose diet meets Dietary Guidelines for Americans
- Implementation and evaluation of an intervention by at least 1 healthcare system that demonstrates cost effectiveness of prevention
- Recommendations by major insurers and Medicaid to improve coverage for prevention
- Recognition Program honors 50 schools, worksites and communities
- 25% of children walk or bike to school
- 70% of after-school and community programs offer PA
- 67% of schools provide PA outside of PE classes
- Decrease % of children who watch >2hrs/day of TV
- 3 data sharing partnerships established
- Surveillance systems with key variables for all age groups established

long term outcomes 2010

- Increased implementation of evidence based interventions
- Health professionals training programs include obesity prevention and control
- Teacher training programs include link between student performance and N&PA
- 50 community environmental audits
- Activity friendly policies adopted by 100% of MPOs
- 100% of school districts adopt policies for 150 minutes of PE/week for K-5, and 225 minutes for 6-12 through school or homework
- Increased insurance coverage for prevention, assessment and management of overweight & obesity
- Increase in adoption or expansion of state and local policies that affect prevention and management of overweight & obesity
- Increased funding for facility enhancements for active lifestyles
- Adequate funding for community level N&PA professionals
- 25% of infants breastfed for 12 months
- 6% increase in children meeting fruit and vegetable recommendations
- 34% of teens meet recommendations
- 28% of adults meet recommendations
- Increased % of children whose diet meets Dietary Guidelines for Americans
- 80% of schools offer school breakfast by 2012
- Increased number of benefit packages offered by employers that include N&PA
- Recognition Program honors 50 communities
- Decrease % of sedentary adults to 12%
- Add modules and questions to BRFSS necessary to track key indicators in State Plan
- Implement N&PA Disparities Plan
- Increase number of interventions targeting populations at high risk for obesity

adult body mass index (BMI) table

BMI	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
	WEIGHT IN POUNDS																
HEIGHT																	
4'10" (58")	91	96	100	105	110	115	119	124	129	134	138	143	148	153	158	162	167
4'11" (59")	94	99	104	109	114	119	124	128	133	138	143	148	153	158	163	168	173
5'0" (60")	97	102	107	112	118	123	128	133	138	143	148	153	158	163	168	174	179
5'1" (61")	100	106	111	116	122	127	132	137	143	148	153	158	164	169	174	180	185
5'2" (62")	104	109	115	120	126	131	136	142	147	153	158	164	169	175	180	186	191
5'3" (63")	107	113	118	125	130	135	141	146	152	158	163	169	175	180	186	191	197
5'4" (64")	110	116	122	128	134	140	145	151	157	163	169	174	180	186	192	197	204
5'5" (65")	114	120	126	132	138	144	150	156	162	168	174	180	186	192	198	204	210
5'6" (66")	118	124	130	136	142	146	155	161	167	173	170	186	192	198	204	210	216
5'7" (67")	121	127	134	140	146	153	159	166	172	178	185	191	198	204	211	217	223
5'8" (68")	125	131	138	144	151	158	161	171	177	184	190	197	203	210	216	223	230
5'9" (69")	128	135	142	149	155	162	169	176	182	189	196	203	209	216	223	230	236
5'10" (70")	132	139	146	153	160	167	174	181	188	195	202	209	216	223	229	236	243
5'11" (71")	136	143	150	157	165	172	179	188	193	200	206	215	222	229	236	243	250
6'0" (72")	140	147	154	162	169	177	184	191	199	206	213	221	228	235	242	250	258
6'1" (73")	144	151	160	166	174	182	180	197	204	212	210	227	235	242	250	257	265
6'2" (74")	148	155	163	171	179	186	194	202	210	218	225	233	241	249	256	264	272
6'3" (75")	152	160	168	176	184	192	200	208	216	224	232	240	248	256	264	272	279

Source: Evidence Report of Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults, 1998. NIH/National Heart, Lung, and Blood Institute (NHLBI). A comprehensive listing of BMI Tables for Children can be found on the Centers for Disease Control (CDC) website at www.cdc.gov/nccdphp/dnpa/bmi/bmi-for-age.htm

The mathematical formula to calculate adult BMI is:

$$\text{BMI} = \frac{\text{Weight in Pounds} \times 703}{(\text{Height in inches}) \times (\text{Height in inches})} \qquad \text{BMI} = \frac{\text{Weight in Kilograms}}{(\text{Height in meters}) \times (\text{Height in meters})}$$

5 A Day Program: A nationwide program to encourage the consumption of fruits and vegetables to improve the nation's health.

Action for Healthy Kids (AFHK): A nonprofit organization formed specifically to address the epidemic of overweight, undernourished and sedentary youth by focusing on changes at school. AFHK works in all 50 states and the District of Columbia to improve children's nutrition and increase physical activity, which will in turn improve their readiness to learn.

Active Community Environments: Communities where people of all ages and abilities can easily enjoy walking, bicycling, and other forms of recreation. These communities support andpromote physical activity with adequate sidewalks, bicycle facilities, paths, trails, parks as well as recreational facilities. These communities also have implemented mixed-use industrial and residential areas using a linked network of streets that allow for easy walking between homes, work, schools and stores.

Behavioral Risk Factor Surveillance System (BRFSS): A surveillance system that uses a population-based telephone survey to assess behavioral health risk factors of American adults. The BRFSS provides national and state data for following trends in obesity, physical activity, and fruit and vegetable consumption. Wisconsin residents aged 18 or older and living in households with telephones are chosen to participate by random selection.

Body Mass Index (BMI): An anthropomorphic measurement of weight and height that is defined as body weight in kilograms divided by height in meters squared. BMI is the commonly accepted index for the classification of overweight and obesity in adults and is recommended to identify children and adolescents who are underweight, overweight or at-risk for overweight.

Centers for Disease Control and Prevention (CDC): The CDC is a branch of the United States Department of Health and Human Services and is recognized as the lead federal agency for protecting the health and safety of people - at home and abroad, providing credible information to enhance health decisions, and promoting health through strong partnerships.

Chronic Disease: Illnesses that are prolonged do not resolve spontaneously and are rarely cured completely.

Coalition: A union of people or organizations involved in a similar mission working together to achieve goals.

Collaboration: Working in partnership with other individuals, groups or organizations, or through coalitions with inter-organizational representation, toward a common goal.

Community: A social unit that can encompass where people live and interact socially (a city, county, neighborhood, subdivision or housing complex). It can be a social organization wherein people share common concerns or interests. Often, a community is a union of subgroups defined by a variety of factors including age, ethnicity, gender, occupation and socioeconomic status.

Department of Health and Family Services (DHFS): A Wisconsin state agency. DHFS administers the CDC cooperative agreements for chronic disease, including the Nutrition and Physical Activity program. DHFS also administers the WIC Program, WIC Farmers' Market Nutrition Program, Loving Support through Peer Counseling, 5 A Day Program, Food Stamp Nutrition Education Program, Commodity Supplemental Feeding Program, and the Emergency Food Assistance Program. The department also monitors the health of Wisconsin residents though various surveillance systems.

Department of Public Instruction (DPI): A Wisconsin state agency. DPI administers the National School Lunch and Breakfast Programs, the Child and Adult Care Feeding Program, Team Nutrition, Comprehensive School Health Program and the Youth Risk Behavior Survey.

Department of Transportation (DOT): A Wisconsin state agency. DOT supports all forms of transportation. The department is responsible for planning, building and maintaining Wisconsin's network of state highways and Interstate highway system. DOT plans, promotes and financially supports statewide air, rail and water transportation, as well as bicycle and pedestrian facilities.

Dietary Guidelines for Americans (DGA): Dietary Recommendations for healthy Americans age 2 years and over about food choices that promote health specifically with respect to prevention or delay of chronic diseases.

Epidemic: Widely prevalent and rapidly spreading.

Exercise: Physical activity that is planned or structured. It involves repetitive bodily movement done to improve or maintain one or more of the components of physical fitness-cardio respiratory fitness, muscular strength, muscular endurance, flexibility, and body composition.

Healthy Eating: An eating pattern that is consistent with the USDA Dietary Guidelines for Americans. Individual and cultural preferences can be accommodated within an eating pattern that is considered healthy.

Inactivity: Not engaging in any regular pattern of physical activity beyond daily functioning

Intervention: An organized, planned activity that interrupts a normal course of action within a targeted group of individuals or the community at large so as to reduce an undesirable behavior or to increase or maintain a desirable one. In health promotion, interventions are linked to improving the health of a population or to diminishing the risks for illness, injury, disability or death.

Leisure-time Physical Activity: Activity that is performed during exercise, recreation, or any additional time other than that associated with one's regular job duties, occupation, or transportation.

Moderate-intensity Physical Activity: Physical activity that requires sustained rhythmic movements and refers to a level of effort a healthy individual might expend while walking briskly, mowing the lawn, dancing, swimming, bicycling on level terrain, etc. The person should feel some exertion but should be able to carry on a conversation comfortably during the activity.

National School Lunch Program: (NSLP) is a federally assisted meal program operating in public and non-profit private schools and residential childcare institutions. It provides nutritionally balanced, low-cost or free lunches to children each school day.

Obesity: An excessively high amount of body fat in relation to lean body mass in an individual. The amount of body fat includes concern for both the distribution of fat throughout the body and the size of the body fat tissue deposits. In Body Mass Index measurements, obesity is defined as a BMI equal to or greater than 30 in adults.

Overweight: An increased body weight in relation to height, when compared to some standard of acceptable or desirable weight. In Body Mass Index standards, obesity is defined between 25 and 25.9 or greater in adults. In children and youth, a gender and age-specific BMI measure that places the individual at or above the 95th percentile for children and youth aged 2 – 20 years old.

Partnership: A group of individuals or groups that work together on a common mission or goal.

Pediatric Nutrition Surveillance System (PedNSS): A program-based surveillance system that monitors the nutritional status of low-income infants, children, and women in federally funded maternal and child health programs.

Physical Activity: Bodily movement produced by the skeletal muscles that results in an energy expenditure and is positively correlated with physical fitness. Can also include household duties such as sweeping floors, scrubbing, washing windows, raking the lawn, etc.

Physical Fitness: A measure of a person's ability to perform physical activities that require endurance, strength, or flexibility and are determined by a combination of regular activity and genetically inherited ability.

Portion Size: Sizes of foods and beverages that are appropriate and contribute to total diet quality and do not result in energy imbalance relative to the individual's age and activity level.

Regular Physical Activity: Activity that is performed most days of the week that includes 5 or more days of moderate-intensity activities OR 3 or more days of the week of vigorous activities.

School Health Education Profile (SHEP): A CDC survey administered every even year by the Department of Public Instruction (DPI) to health education teachers and middle and high school principals. The survey examines health education and physical activity policies and practices of school.

School Health Index (SHI): A tool developed by CDC for schools to assess their nutrition and physical activity environments, plan and implement improvements and monitor change over time.

Sedentary Lifestyle: A lifestyle characterized by little or no regular physical activity.

Social Marketing: The application of commercial advertising and marketing concepts to the planning and implementation of programs intended to influence the voluntary behavior change of a target audience in order to improve personal welfare and that of society.

Social-Ecological Model: The model suggests that behavior change requires not only educational activities, but also advocacy, organizational change efforts, policy development, economic support and environmental change and that these "spheres of influence" can have an impact on individual health behavior. Rather than focusing on personal behavior change interventions with groups or individuals, public health problems must be approached at multiple levels, stressing interaction and integration of factors within and across levels.

Stakeholder: An individual or organization that has an appreciation of the issues or problems involved in a health promotion program and has something to gain or lose as a result of their participation. This person or group has a stake in the outcome of the health promotion program.

Surveillance System: A continuous, integrated and systematic collection of health-related data.

Target Audience: A group of individuals or an organization, sub-population or community that is the focus of a specific health promotion program or intervention.

Vigorous-intensity Physical Activity: Activity that requires sustained, rhythmic movements that is intense enough to represent a substantial challenge to an individual and results in a significant increase in heart and breathing rate.

Wisconsin Nutrition and Physical Activity Workgroup (WINPAW): The group formed in 1999 to address childhood overweight in the Child Nutrition Programs. As the group expanded overtime to include more partners its focus shifted to all age groups. This group developed the Nutrition and State Plan. In 2005, the name was changed to the Wisconsin Partnership for Activity and Nutrition.

Wisconsin Partnership for Activity and Nutrition (WI PAN): The group that provides statewide leadership to improve the health of Wisconsin residents by decreasing overweight and obesity, improving nutrition and increasing physical activity. The Partnership will facilitate the implementation of the State Plan.

Youth Risk Behavior Surveillance System (YRBSS): A system developed by CDC to monitor priority health risk behaviors that contribute to the leading causes of morbidity, mortality and social problems among youth in the United States. The survey is administered in Wisconsin to middle and high school students every other year.

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Alexandra Adams
University of Wisconsin
Department of Family Medicine

David Ahrens
University of Wisconsin
Comprehensive Cancer Center

Julie Allington
Department of Public Instruction

Keith Bakken
Wisconsin Association for Health, Physical Education, Recreation and Dance

Mary Jo Brink
Division of Public Health
Cardiovascular Health Program

Jill Camber-Davidson
Dane County Human Services
Dane C.A.N.

Aaron Carrel
University of Wisconsin Medical School, Department of Pediatrics

Sachin Chheda
Office of the Governor

Nancy Chudy
Division of Public Health

Larry Corsi
Department of Transportation

Amy DeLong
Ho-Chunk Youth Fitness Program

Rosemary Dolatowski
Burlington Area School District
Wisconsin Association of School Nurses

Susan Doyle
St. Mary's Hospital
Madison

Jane Dunn
University of Wisconsin Hospital and Clinics

Charmaine Garry
Ho-Chunk Youth Fitness Program

Debra Gatzke
Dodge-Jefferson Healthier Community Partnership

Mary Jane Gettlinger
University of Wisconsin
Department of Nutritional Sciences

Claude Gillmore
Division of Public Health
Comprehensive School Health Program

Laura Graney
Sheboygan County Health Dept.

Heather Harvey
University of Wisconsin
Cooperative Extension

Peggy Helm-Quest
Division of Public Health
Family Health Section

Amy Helwig
Quad Med

Patti Herrick
Division of Public Health
Nutrition & Physical Activity Section

J.A. "Doc" Hines
Wisconsin State Assembly

Jon Hisgen
Department of Public Instruction

Tim Hoven
Hoven Consulting, Inc.
Wisconsin Association of Family Physicians

Tom Huber
Department of Transportation

Paula Itzov
Division of Public Health
Northern Regional Office

Stacia Jankowski
Department of Health and Family Services

Kit Keller
Wisconsin Walks, Inc.

Jodi Klement
Division of Public Health
Nutrition & Physical Activity Section

Michael Kretz
Wisconsin Medical Society

Matt Landis
University of Wisconsin
Population Health Institute
Graduate Student

Linda Lee
La Crosse County Health Dept.

Mary Ann Lippert
Marshfield Center for Community Outreach

Beth Lucas
Eau Claire City/County Health Dept.

Ward Lyles
1000 Friends of Wisconsin

Kelly McDowell
Wisconsin Beverage Association

Rebecca Meert
Brown County Health Department

Nicole Mueller
Wisconsin Sports Development Corporation

Javier Nieto
University of Wisconsin
Department of Population Health Sciences

Susan Nitzke
University of Wisconsin
Department of Nutritional Sciences - Cooperative Extension

Suzanne Oehlke
Portage County Health Dept.

Judy Omernik
Marathon County Health Dept.

Karen Ordianans
Children's Health Alliance of Wisconsin

Neacia Pacheco
Wisconsin Restaurant Association

Colleen Peck
Quad Med

Susan Peterman
Department of Public Instruction

Linda Petersen
Division of Public Health
Western Regional Office

Sara Peterson
Ho-Chunk Youth Fitness Program

Margaret Pfeiffer
Wisconsin Dietetic Association

Michele Polfuss
Children's Hospital of Wisconsin - Neenah

Molle Polzin
Department of Public Instruction

Ron Prince
University of Wisconsin
Department of Family Medicine

Jeffrey Ranous
American Heart Association

Patrick Remington, MD
University of Wisconsin
Population Health Institute

Amy Rettammel
University of Wisconsin
Cooperative Extension

Deborah Roussos
Group Health Cooperative
HMO

Ellyn Satter
Ellyn Satter Associates, Inc.

Catherine Sendelbach
Division of Public Health
Northeastern Regional Office

Sherie Sondel
Division of Public Health
Southern Regional Office

Stephen Sondike
Medical College of Wisconsin
NEW Kids Program

Lisa Stark
Mount Mary College

Mary Jo Tuckwell
School Nutrition Association of Wisconsin

Albert Tzeel
Humana Insurance Corporation
Wisconsin Association of Health Plans

Gail Underbakke
University of Wisconsin Medical School, Department of Medicine

Michelle Urban
Division of Health Care Financing

Brian Weaver
Department of Public Instruction

Robbie Webber
Bicycle Federation of Wisconsin

Connie Welch
Division of Public Health
Nutrition & Physical Activity Section

Pat Zapp
Division of Public Health
Diabetes Prevention & Control Program

Anthony Zech
Division of Public Health
Nutrition & Physical Activity Section

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Wisconsin Nutrition and Physical Activity Program

staff

Mary Pesik, RD, CD
Nutrition and Physical Activity Program Coordinator
phone: 608.267.3694
e-mail: pesikmj@dhfs.state.wi.us

Amy Meinen, RD, CD
Nutrition Coordinator
phone: 608.267.9194
e-mail: meineam@dhfs.state.wi.us

Jon Morgan, MS
Physical Activity Coordinator
phone: 608.266.9781
e-mail: morgajg@dhfs.state.wi.us

Joanne McCluskey
Program Assistant
phone: 608.266.3891
e-mail: mcclujm@dhfs.state.wi.us

Department of Health and Family Services • Division of Public Health • Wisconsin Nutrition and Physical Activity Program

PO Box 2659 Madison WI 53701-2659 • phone: 608.267.3694 • fax: 608.266.3125

e-mail: pesikmj@dhfs.state.wi.us • Visit our website at: http://dhfs.wisconsin.gov/health/physicalactivity/index.htm

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